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LAPIDARY JOURNAL JEWELRY ARTIST

NOVEMBER
2015

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Super ways
to use
tassels

Make this
**PRONG
TEXTURED
PENDANT**
... with surprise back!

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Plus
Laser-
Patterned
Silver Fern
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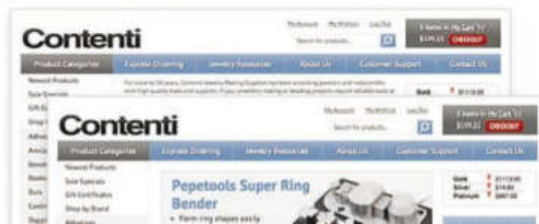


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\$285⁰⁰

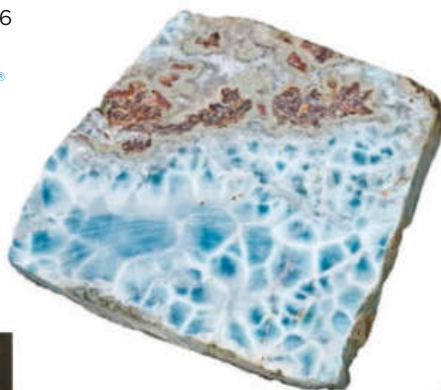
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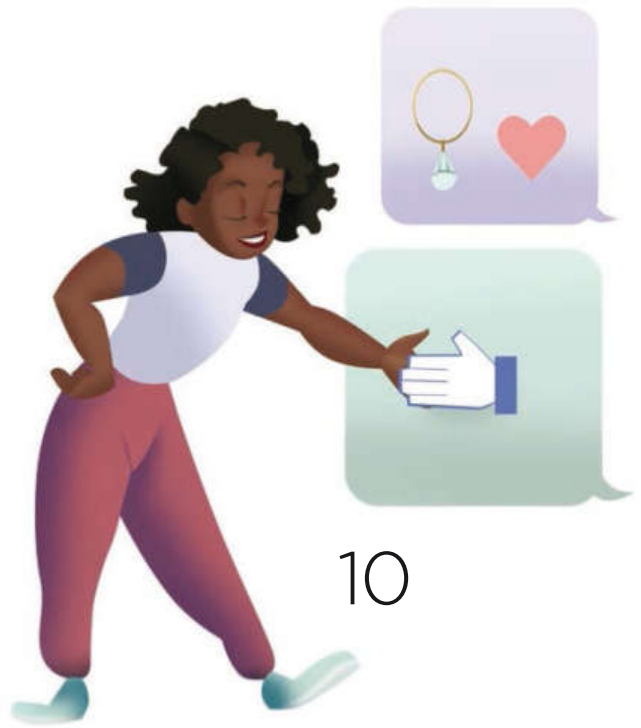
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ABOUT OUR COVER:

John F. Heusler, G.G.'s Pectolite & Pearl Pendant, page 40; inset: Betsy Lehdorff's Saw Pierced Fern Leaf Cuff, page 48.

PHOTOS: JIM LAWSON

I Love Surprises



WHAT EXACTLY IS prong texture? Take a look at the setting for that stone in the pendant on our cover this issue: it's obvious that the bezel has been decorated with lines that give the piece an extra bit of detail. If you look very closely, though, or read about making that bezel in the project starting on page 40, you will discover that those lines are fairly deep divisions in the metal that effectively turn the entire bezel into a continuous series of tightly distributed prongs.

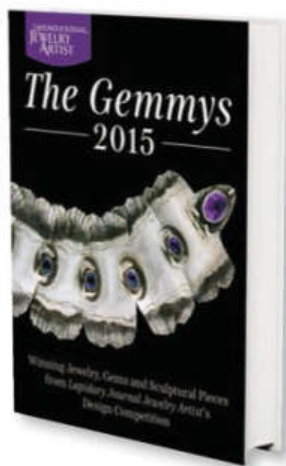
I love it when something functional is seamlessly integrated into a design like that. I love the dynamic look of those lines and the 3D sensation I feel in my finger tips when my eyes run over that texture. I also love the idea that an extra secure but unobtrusive setting is on duty for the stone, and that I had no idea all those prongs were prongs. So often I find prongs distracting if not downright ugly, and here I am mesmerized by them when I didn't even know they were there!

There are other surprises in this piece as well. Flip it over to see if there's any interesting engineering on the back and you'll find instead a simply pierced and perfectly charming palm tree. It echoes the tropical island theme suggested by the blue pectolite with its own surprisingly shimmering play of light rippling across the gem the way the sun might dance across the waters of the Caribbean — or to jewelry artist John Heusler's mind, Australia's Great Barrier Reef, but you get my drift.

Unexpected movement, hidden compartments or mechanisms, design elements where only the wearer will see them — these and other surprises have been delighting jewelry makers and owners for centuries, and still make us smile when we come upon them. Add your own surprise to a design and see how someone else lights up when it makes them remember something they love!

Merle White
Merle.White@fwcommunity.com

P.S. We all love surprises that are fun, that is, not frustrating! Last issue I announced the publication of our book *The Gemmys 2015: Winning Jewelry, Gems and Sculptural Pieces from Lapidary Journal Jewelry Artist's Design Competition*, which is available in our online store. I heard from several of you, though, that our intended easy-to-use url wasn't. My apologies! So just in case you've been having a problem locating his compilation of surprising designs, you can find it at this straightforward address: interweavestore.com/the-gemmys-2015.



LAPIDARY JOURNAL JEWELRY ARTIST

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YOUR TURN

reader comments & sketches

NEXT TIME:



John F. Heusler, G.G.'s Pectolite & Pearl Pendant, COVER.

Riff on a design feature of this piece such as color, texture, form, value, line, space, repetition, balance, contrast, unity, or variety for your sketch.



Sketch a setting for this pectolite/Larimar cabochon from Smokin' Stones, page 38.

DEADLINES:

NOVEMBER 30, 2015

Email digital scans at 300 DPI or send photocopies of no more than three sketches per challenge, indicating the design factor that is your starting point. Sketches will not be returned.

WRITE TO US ANYTIME:

What do you think about what you've seen and read in *Lapidary Journal Jewelry Artist*?

SEND SKETCHES & LETTERS

for possible print or online publication to: Karla. Rosenbusch@fwcommunity.com; or Lapidary Journal Jewelry Artist, 88 Glocker Way, #299, Pottstown, PA 19465.

Include your name, city, and state, and indicate "Your Turn" on the subject line or envelope.

› DESIGN CHALLENGES

YOUR COVER RIFFS:

Designs based on Lilian Chen's Square Wire Heart, July, 2015.



Shevvy Baker
Louisville,
Kentucky

Peggy Haupt
Gatlinburg, Tennessee

YOUR SETTINGS:

Designs based on a Fossilized Red Oak cabochon, July, 2015.



Cathy Ewald
Noblesville,
Indiana



Ben Holden
Barstow, California



Thomas Wickline
Tacoma, Washington

› LETTERS

Re: "How to Develop a Line: Production Earrings," July, 2015

In the article about making production jewelry, I don't understand how the jeweler came up with a price of \$40 for the earrings. What kind of formula was used to come up with that price? If the total cost of materials for each pair was \$4, the time and work was very minimal, I just don't understand a \$40 price tag.

Fussyfinery

From the JewelryMakingDaily.com Forums

Betsy Lehndorff responds:

I appreciate this question. If you feel the price is too high, let me explain. A lot of work goes into these simple earrings. Even though I am making them in multiples, they require at least 15 steps to create, plus the cost of wear and tear on my hands and tools, chemicals, heat for the studio, time spent ordering stones and bezel cups, ink and stamps for tags, postage to deliver them to galleries. Galleries that show my work charge 40 to 50 percent commission. So if I earn \$16 on 20 pairs of earrings, that's actually \$320 for a day's work. Do note, one gallery in a wealthy area asked me to increase the price to \$80 a pair, because "no one looks at anything under \$40. Other pieces of my work sell for \$200 to \$1,100, so the \$40 earrings are a nice price option. [Editor's note: For more on pricing strategies, see "Ask the Experts," page 66.]





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Bangles, Courtesy of BELLARMI, Earrings Courtesy YTEL

THEIR TURN

a gallery of this issue's contributors



PHOTO: JIM LAWSON

JOHN F. HEUSLER, G.G.'S Kaily Agate Pendant

Kaily agate, diamond, sterling silver, 18K yellow gold
"Pectolite & Pearl Pendant"
Page 40



PHOTO: SYLVIA
BISSENETTE

JIM GRAHL'S Ring

Garnet, gold,
diamonds, hand-
engraved
"Texture with
Hammers,
Punches, and
Gravers"
Page 18

PHOTO: COURTESY VICTORIA LANSFORD

PHOTO: DOUG YAPLE

MELISSA CABLE'S Moonrise Bracelet

Leather, copper
Lapidary
Journal
Jewelry
Artist Doer's
Profile
Page 72





NOËL YOVOVICH'S

25 Birds Dual Image Reversible Bracelet

Anodized titanium, copper/silver bimetals, sterling silver

"Designing with Paper Clay" Page 54



HELEN DRIGGS'S

Fold Pendant

Sterling and fine silver, copper, labradorite

Cool Tools & Hip Tips Page 12

"Designing with a Shape" Page 30

? WANT TO CONTRIBUTE?

Share your expertise with other readers in a project, demo, or article and you'll be invited to show an example of your work here. Contributors' guidelines can be requested by emailing MWhite@Interweave.com, subject line: LJJG Guidelines.

BETSY LEHNDORFF'S

Fern Leaf Earring

Sterling silver, freshwater pearl

"Saw Pierced Fern Leaf Cuff" Page 48



BILL FRETZ'S

Fluted Cuff

Textured brass

"Texture with Hammers, Gravers, and Punches:" Page 18



By Cathleen McCarthy

Online Etiquette

get your jewelry noticed by playing nice

If someone comes up to you on a city street with their hand out and a big fake smile, what is your reaction? If you're like me, you avert your eyes. Nobody wants to be hit up by a stranger. Don't expect to get much by hitting someone up blind on social media.

This happens to me often on Facebook and Twitter. I chose to make my blog's Facebook page publicly accessible, which means anyone can post messages others can see. I wanted my page to be interactive and inviting, to create a global conversation about jewelry.

I succeeded — but doing that means people can use my page for free advertising, in a way they can't on my blog. Which brings us to . . .

Social Etiquette Rule 1: Open a conversation with a compliment or a joke, not a demand.

People often comment on my blog by posting links to their sites. Sometimes, these read: "Love your blog! Check out our jewelry designs," followed by a link to their site. Usually, I don't even get the love first. I often profile jewelry designers on my site, so I guess people figure this is a way to get on the radar.

Personally, I prefer email over an attempt to sneak in an unpaid ad. You can't post a comment without my permission, so those attempts get deleted — i.e., the opportunity to engage is over before it began. Don't get me wrong. I like providing a boost to designers and artists I admire and don't mind a dissenting opinion. But I'm not working this hard to create a free advertising vehicle for anybody who feels like parachuting in.



ILLUSTRATION: STEPHAN PARK

Same thing happens on social media. Recently, a jeweler posted a message on my Facebook page, asking me to "check out their designs" by posting a link to their site. That same day, a designer from San Francisco named Susan posted

a message saying, "You do such a fantastic job, always so interesting!"

The jeweler who posted first is probably not one I'd cover on my blog, but I might have stashed him away as a source for magazine stories. As for the link he posted, it's practically invisible on my page. I doubt it was seen by many, let alone clicked on. In other words, I suspect he alienated me without reaching my audience.

When I didn't respond to his "message," he tried again a few days later, posting a link to his site as a comment that had nothing to do with my post about a Cartier forgery I'd spotted at auction. By this time, not only was I not responding, I was clicking "hide" on his comments so they wouldn't distract from the interesting conversation going on. He had progressed from mildly inappropriate to seriously annoying.

But Susan of San Francisco? I clicked "like" on her message, thanked her in the comments, then went to her page and checked out her stuff. If she comments again, I'll know who she is. What she did was to begin a relationship with me. Who knows where it will lead?

If you want the attention of someone with a following on social media, try Susan's approach. Acknowledge the content people post, instead of taking advantage of the audience they've built by parachuting in and placing ads disguised as messages or comments.

Social Etiquette

Rule 2: Once you've made a connection, follow up while they still remember you.

Social media is a social gathering played out for public consumption. This adds impact to a compliment — and it works both ways.

Here's an example of my own efforts to reach out on social media. Checking my Google Analytics recently, I noticed a 2011 post about the jewelry on "The Good Wife" was still getting hundreds of hits each month, even though the show was between seasons (not on the air). I dug deeper and discovered it's been viewed more than 20,000 times and there are now 18 comments under it.

There's obviously strong interest in the show's jewelry. How could I follow up?

I know from experience it's nearly impossible to get the attention of the costume designer of a popular show. They work long hours and are inundated by media requests from magazines far more impressive than my blog — and dealing with publicity directors is time-consuming and often futile.

But, given the traffic my post attracts — it shows up on the first page of a Google search for "The Good Wife jewelry" — it's possible Lawson knew about it. So I searched his name on Twitter and discovered he has an active account under the tag @goodwifefashion. I followed him,

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tweeted a link to my post, and tagged him: "People love the jewelry on #TheGoodWife! Designer @good-wifefashion knows his stuff." (Notice I incorporated three live links in one tweet — to Daniel, my post, and the show. Miraculously, that fit into 140 characters.)

I used flattery, but it was sincere. I'm a fan of "The Good Wife," as my original post reveals, and love how jewelry is used on the show. Lawson retweeted me, and I responded by asking for a follow-up. Next morning, he retweeted this as well, adding "Of course!" Within days, I had scheduled an interview with the costume designer of a show that's received five Emmys and had just been picked up for a seventh season two weeks before. Yes!

I can't guarantee following this example will get you the ear of someone in the spotlight. It probably helped that I approached him when the show was on hiatus and didn't hurt that I have 7,000 followers on Twitter. Daniel Lawson also happens to be an aspiring jewelry designer who wants to get the word out about his jewelry and seems like a genuinely nice person.

Open online conversations with a friendly overture. There's nothing wrong with asking for something — a

look at your website, an interview for your blog — after establishing a friendly connection, but present it in a way that benefits your new connection. We're all busy people trying to make a living.

As best-selling author Nora Roberts once said: "If you don't go after what you want, you'll never have it. If you don't ask, the answer is always no." But, as Mom would say, "Ask nicely."

CATHLEEN MCCARTHY is a freelance writer whose stories on jewelry, travel, and commerce have appeared in *Town & Country*, *Art & Antiques*, and her own site, TheJewelryLoupe.com.

find more online

"How to reach the unreachable on social media"



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COOL TOOLS & HIP TIPS

BY HELEN I. DRIGGS | PRODUCT PHOTOS: JIM LAWSON

Notable new equipment and supplies

Shop Essentials

IN THIS BUSINESS, STUFF IS A FACT OF LIFE. Sure, hand tools are off the hook, and who doesn't love them? But there are also big or small equipment and all manner of non-tool stuff in a typical jewelry studio. This particular class of stuff often makes your job as an artist possible — think bench, rolling mill, anvil, or tool cabinet. Then there is the other stuff you'll require that you run out of over time, plug in, attach, or otherwise can't work without — like task lamps, compounds, or gas tanks and small electric equipment. You couldn't function well without these things, but it's hard to call them tools. One thing is certain, though: once you get used to having them around, you won't know how to work without them.

The Line on Finishing

Once I discovered the **Lortone 3A Tumbler** (TUM-110.00), I retired two imported, inexpensive tumblers to the sacrificial classroom tool box in a nanosecond. This model packs a big punch in a small space, and since it has a footprint about the size of a file folder, there is no excuse not to add one to your shop. With a single hard rubber barrel to minimize noise when tumbling for a long time, the durable motor can roll a 3 lb. load with ease. Weighing in at 5 lbs., this little workhorse is great for burnishing, work hardening, and general cleanup and finishing of all types of metal work, if you add a 2-pound bag of **Stainless Steel Shot** (TUM-125.02) and an 8oz. bottle of **Shinebrite Burnishing Compound** (TUM-510.01).

And another thing: this is a Lortone machine, and they've got a long history in the lapidary industry, so if tumbling rocks is your thing, this model will not disappoint. Of course, you'll need to purchase lapidary grits for that task, and it's not a good idea to use the same barrel for both metalwork and stone, so be sure to have an extra **Replacement Barrel** (TUM-110.05) or two on hand if you are a stone-minded individual and intend to go that route with this machine. Either way, this tumbler is a super workhorse for both rock and metal and it will not let you down.

MORE AT JEWELRYTOOLS.COM



While I am on the topic of finishing and polishing, try a **100% virgin wool buffing wheel** from Allcraft USA, and you'll find it will not goop up with compound as quickly as other wool wheels might. These 6" wheels are manufactured from wool suiting remnants, too, making them eco-friendly, which is always a bonus in my book. I used mine to polish a heavily tarnished, vintage silverplate serving spoon and got a smooth mirror finish very quickly. These are super nice — if you have a full-sized buffing machine. I hope they get around to making smaller ones for the flex shaft, too!

MORE AT ALLCRAFTUSA.COM

Sure, they are designed for cleaning, but if you really want to put your stone setting skills to the test, you need an ultrasonic cleaner. Why? Well, I'll tell you. An ultrasonic will shake out a badly set stone in a microsecond — saving you the embarrassment of losing it when it's really not convenient. Plus, nothing else clears away greasy polishing compound like an ultrasonic.

This 110-volt **Ultraschallreinger 800** ultrasonic cleaner (CLN-520.20) cleans quickly and efficiently at 42,000 cycles while you get on to other tasks at your bench. Being a neat-freak as well as a multi-tasker, I love the stainless steel one-piece tank and attached see-through lid that lets me peek at the work in progress. Load and unload the plastic cleaning basket in a snap. All in a nicely designed compact unit, so what's not to love?

PS: Not for pearls, opals, organics or other soft or delicate materials — but you knew that, right?

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As seen in
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Attention, Cutters!

This is huge. Really. When I learned about **Stellar Lubricants Orange Scented Mineral Oil** for use in lapidary saws and equipment earlier this year at the Tucson shows, I was actually jumping for joy. This oil is nontoxic, environmentally friendly, gentle on your hands, smells good, is easy to clean up, and best of all? It works really well! Which means that I will never again hesitate chopping up a big hunk of rock because I know I won't have to deal with that nauseating smell or have a colossal mess to contend with at the end of day. Cleanup on the sawn slabs is simple, too — just a short rest in some clean kitty litter to draw off any excess oil, and then a warm water and Dawn detergent soak for a few hours. I scrub with a brush, too, 'cause I'm like that.

This awesome oil is available in either 5-gallon pails or 2-gallon jugs, and if you are daunted by the shipping fee, don't be. Several of their distributors are also active on the rock and mineral show circuit, so you might be able to pick some up at a tent near you. O, happy day!

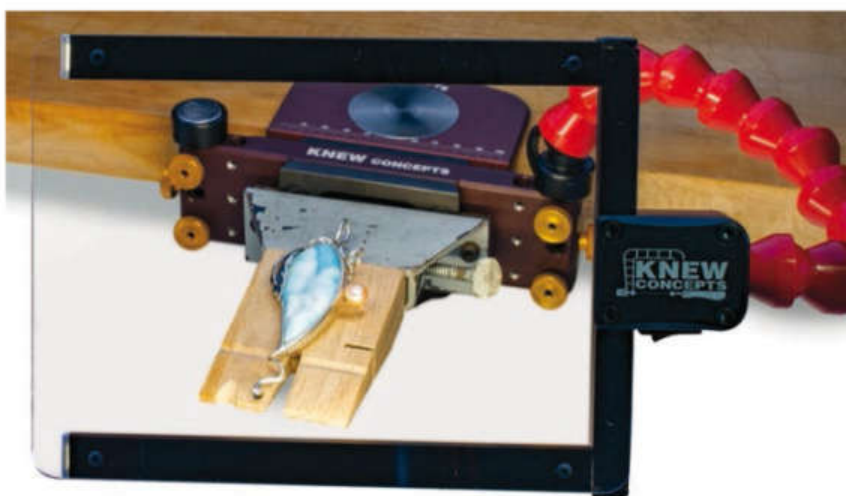
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HELEN DRIGGS is Senior Editor for *Lapidary Journal Jewelry Artist* and an experienced metalsmith and teacher. Follow her blog: materialsmithing.wordpress.com; Instagram feed: [hdriggs_fabricationista](https://www.instagram.com/hdriggs_fabricationista); and Twitter feed: [@fabricationista](https://twitter.com/fabricationista) for more jewelry-related fun.

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Texture *with* Hammers, Punches, and Gravers



Use these tools to hammer, sculpt, and engrave an infinite variety of look and feel on your metal surfaces

BY SHARON ELAINE THOMPSON

One of the advantages of working with precious metals is that they're soft enough to be shaped and drawn with relative ease. The fact they are this malleable and ductile also means that they can be textured.

Why texture metal? Texturing creates a surface that may be more visually interesting than one that is highly polished. Texturing also creates a tactilely interesting surface. Textures can be used to create contrast with highly polished surfaces. And textures can be used to manipulate light from a highly reflective metal surface.

A common textured surface can be created with a brass brush in a buffing machine, but there are many more interesting ways to texture metal by hand. Three of these are hammering, repoussé and chasing, and engraving. We talked to four jewelry artists who excel in these methods to get their tips on tools and techniques.

Bill Fretz on Hammered Texture

There is little doubt that Maine jewelry and tool maker Bill Fretz is king of the metalsmithing hammer. Fretz talks about hammers with the same love with which he talks about his grandchildren. He has had a lifetime of investigating all the ways that metalsmiths can use and apply this most fundamental of jewelry working tools.

Fretz revolutionized metalsmithing by designing and manufacturing small hammers specifically for making the small and intricate shapes of jewelry. How small? One of his texturing hammers, made for earrings, is only half an inch across! This means jewelry makers no longer have to make or alter hammers to suit their specific needs, something that has been a drawback for beginners. They can find a Fretz hammer to suit any need.

For a non-metalsmith like me, there is an astonishing number of hammer types: planishing, chasing, goldsmiths, embossing, forming,



Fretz "raw silk"
texturing hammer
PHOTO: FRETZ DESIGNS

raising and, of course, texturing hammers. Essentially, though, almost any hammer can texture metal, as texturing at its most basic is the result of leaving a mark on the metal.

Most hammers are too sharp on the edges, says Fretz, which can cause beginners to mark surfaces unintentionally. "If you strike with the edge of the hammer and form a half moon, you can hammer it out, but it stretches the metal and makes it thinner." Fretz hammers, which his son, Jordan Fretz, manufactures from his workshop in Vietnam, are slightly rolled on the edges to reduce the risk of unintentional damage. "The ability to produce quality hammers is as important as the design," says Bill.

Hammers that are *not* meant to mark a metal's surface are those with nylon, plastic,

MORE ON FRETZ HAMMERS

For more on the Fretz revolution, see Helen Driggs' comments about Fretz hammers in "Ten Most Influential Technical Developments" in the December, 2010 issue of *Lapidary Journal Jewelry Artist*.

Available at interweavestore.com

IF YOU WANT A HAMMER

Hammers are the most basic of the metalsmith's tools. Without a hammer, you are not a smith. Most hammers have two faces that are differently sized or shaped; mallets have identical faces. Most hammers have straight shafts; the exception is the chasing hammer. Most hammers can be used for several functions; some are specialized.

In our glossary of often-used hammers below, "peen" refers to the business face of the hammer. A "ball peen" is a ball-shaped face; a "cross peen" is one that is at right angles to the handle.

BALL PEEN: made of hard, tool steel with one round ball end and a flat end for striking steel tools and punches.

CHASING: used to strike steel tools such as dapping, chasing or repoussé tools, and stamps. The working face of chasing hammers will become marred, so if you plan to use your chasing hammer for texturing or forming, avoid using it to strike steel tools.

FORMING: a heavy hammer with flat or domed faces, used to move metal.

GOLDSMITH'S: with two different faces, one cross peen and one planishing, for alternately raising and planishing.

MALLET: with flat faces of various shapes, and made from rawhide, nylon, plastic or wood; used to form, bend or block metal without marking the surface or noticeably changing the gauge of the metal.

PLANISHING: its slightly domed surface will take out the marks left by a raising hammer while the flat side will remove the marks left by the rounded side of the planishing hammer. How smooth the surface ends up depends on the hammer striking the metal with very small facets.

RAISING: with two rectangular, blunt or wedge-shaped cross peen faces, used to raise the metal from flat sheet to dimensional form by striking the outside of the form over a wood or steel raising stake.

RIVETING: a small hammer with one flat or slightly domed face and the other end a sharp cross peen used for riveting, or flaring pins. Also used for texturing and forming very small parts.

ROUNDED CROSS

PEENS: with two rounded cross peen faces, used to sink metal into a sand bag or die, to form pea pod shapes, or stretch metal from the inside to form bowls and other concave shapes. Also used to flute metal against special fluting stakes.

TEXTURING: with faces cut or engraved with patterns specifically for marking metals.



Straight marks in metal from a Fretz cross peen hammer
PHOTO: FRETZ DESIGNS

Sandstone texture created by a Fretz texturing hammer
PHOTO: FRETZ DESIGNS



and wooden heads, as well as rawhide hammers. Chasing hammers, made of harder steel than many other metalsmithing hammers, are meant to strike steel tools such as dapping, chasing, and repoussé punches, and stamps. Chasing hammers have one ball peen surface that some metalsmiths use for texturing metals, says Fretz, although that is not what it is meant for — that is, almost any hammer can be used to texture. It's simply a matter of learning what marks that hammer makes, how they can be combined, and learning to make them consistently — which is much simpler in theory, of course, than in practice.

It's All About Control

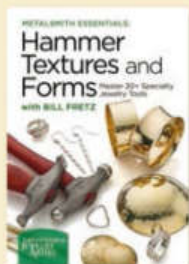
The whole secret to hammering is control, says Fretz. To help you learn control, in his video, *Metalsmith Essentials: Hammer Textures and Forms*, Fretz includes a fundamental exercise creating a low-domed pendant through planishing, or smoothing, the metal. Students learn to make blows consistent, overlapping them slightly to create a smooth surface.

"The hammer has to strike each time, at the same angle, without twisting, which would bring the edge of the hammer into contact with the metal and mark it. You try to hit the same spot on the underlying stake over and over while moving the metal, so the hammer blows overlap. The exception to this would be using a stake with a compound shape."

Hammering control is also a function of how hard you strike the metal. "The hammer simply drops, bounces, and you catch it on the way up and drop it again. You actually use a very light touch," says Fretz. "You should be able to take the hammer out of the hand of the person using it, as they should not be gripping it very tightly."

HAMMER TEXTURES AND TECHNIQUES

- Hammer Textures and Forms with Bill Fretz (video)
- Basic Jewelry Hammering and Forming with Bill Fretz (video)
- Hammering and Forming Jewelry with Bill Fretz, Vol. 2 (video)



Available at
shop.jewelrymakingdaily.com.

Once you gain control over the hammer, you can control your hammered texture. You can use a cross peen face, for example, to make straight marks in one direction or several to create a basket-weave pattern. With the goldsmithing hammer, which has a slightly curved radius on the cross peen, says Fretz, “You can sketch out a curved line, then another line next to that. It starts to look like a Van Gogh painting. You get a wavy design on a flat surface. It creates movement that the eye will follow.”

You can also use one of Fretz’s special texturing hammers to get just the look you want. The HMR-12 hammer has a sharp cross peen face “that creates a very sparkly, hand-engraved look that’s hammered in.”

For an elegant surface, there is his “raw silk” texturing hammer. When used in a controlled grid pattern, the lightly textured face creates a surface like the nubby weave of raw silk. (Both the sharp texturing and the raw silk texturing hammer are part of the Fretz Texturing Hammer Set of 7.)

What does Fretz want people to take away from his video on texturing? “That it’s fun to do. It’s kind of addictive. Making overlapping hammer blows, you can zone out and enjoy watching the process unfold in front of you. I forget what I’m doing. I just look at the result. The technique becomes unimportant and the design becomes dominant. Because the design possibilities are unlimited, you never get bored doing it.”

Victoria Lansford on Repoussé and Chasing

Hammers are instrumental in two other age-old — and often intertwined — processes that are texturing, using the term very broadly: repoussé

and chasing. These two freehand techniques are more akin to sculpting than fabrication.

Repoussé creates relief through hammering the metal from both front and back over a soft but firm support, such as pitch, clay, or plasticine, explains Georgia metalsmith Victoria Lansford. The surface is smoothed by planishing from the front.

Chasing is done only from the front, rather than pushing out the metal from the back. Depth is worked into it with chasing punches, which look a bit like dull chisels. “Chased line work may look like stamping or engraving, but it is hammered in, not cut away,” says Lansford. Chasing adds detail to surfaces already formed by raising, by repoussé, or with a hydraulic press. Pitch or wax placed behind the raised surface supports the metal during chasing so the raised surface does not collapse. While you can use emphatic force when raising or doing repoussé, says Lansford, chasing takes a lighter touch.

Although chasing may look like stamping, it isn’t. Using a stamp, you hold the tool in one spot and strike it to create a mark. When chasing, you “move the tool along like a pen or pencil, with the hammer striking it at the same



ABOVE
Eastern repoussé tools by Victoria Lansford
PHOTO: COURTESY VICTORIA LANSFORD



LEFT
Victoria Lansford
Spirale Sancta Cuff
Eastern repoussé, 22K gold, sterling silver
PHOTO: COURTESY VICTORIA LANSFORD



ABOVE
Victoria Lansford
Aphrodite's Rapture
Necklace
Eastern repoussé,
22K gold, 24K gold,
sterling silver, fine
silver, dolomite
PHOTO: COURTESY
VICTORIA LANSFORD

time," says Lansford. "It's a continuous movement, not a 'place and whack' technique."

Most artists who use these techniques use them together; they vary, however, in how much they alternate working the front of the metal and the back. Lansford uses Eastern repoussé techniques that have come from Egypt, Mesopotamia, and central Europe. "There is a lot more back and forth," she says. "As a result, the relief can be higher."

Eastern repoussé tools differ from Western tools in that they are shorter and held closer to the working end of the tool. "You have more control. The tool doesn't slip," says Lansford. "They're less sharp than other repoussé tools, too. That gives you the ability to work back and forth, going over the same area and the same line without worrying about punching through the metal." Because the tools are different, Lansford, could find no commercial manufacturers of eastern repoussé tools. So she began to manufacture and market them herself (victorialansford.com). Lansford also teaches the technique.

When buying a tool, she says, look at how you plan to use it. Does it suit the type of relief you want, and the process you're going to use? "Does it have the right shape? Is it polished enough? Is it too sharp?" However, you don't need a whole bench full of tools, she adds. "There are artists out there who have hundreds of tools, one in every shape you can imagine. I like the multiple-use option: one tool does a lot of things."

Patterns are created by how you use the tool and how you strike it. For example, she says, she has a decimal point from an old number set. "I can make a line of incised dots, or a tight texture for stippling. You can get nail sets at any hardware store. You can use them to stamp circles far apart for polka dots, or overlap them closely to create bubbles." Curved tools can create parentheses, floral or leaf patterns, waves. "I create

a calligraphic line pattern with a small line tool from my set," she says. You can even adapt letter stamps to your needs.

Jim Grahl and Doug Hall on Engraving

Another way to texture metal is with a graver, a process that removes metal with a sharpened, chisel-like tool (a graver). "Engraving has a unique look, a crispness to it, due to the nature of the incision, the fact that metal is shaved away," says Doug Hall, instructor in GIA's Jewelry Manufacturing Arts program.

Gravers come in different shapes. For texturing, however, Hall says there are four standbys: flat, square, round, and onglette, which has a marquise or football-shaped point.

One very important graver for texturing is the Florentine graver, a family of gravers with multiple lines cut into the tips — the number of lines and the spacing between them can vary. "Florentine used to be *the* texture," says jewelry artist Jim Grahl. Usually a basket-weave texture is done with a Florentine graver.

Gravers are held in the dominant hand, while something holds the metal you're engraving. Classically, this may be a bowl of pitch or an engraving block. But, says Hall, it could be as simple as a block of wood and hot melted glue. Whatever you use, it should hold the metal firmly and not give. "You can chip the point of the graver if the piece flexes too much when you apply the tool," says Hall. You'll need to rotate the holding device because engraving is done by moving the metal into the graver point as well as pushing the graver along the metal surface.

While classical engraving's long straight or curving lines can take time to master, Hall says that using a graver to texture should be much



RIGHT
Jim Grahl
Irish Men's Deco
Ring
18K rose gold,
stainless steel,
titanium, hand-
engraved
PHOTO: JIM GRAHL
DESIGN

simpler. You'll be making many small, shallow cuts, which will give you a lot of practice.

Texturing might take the form of multiple lines applied with a Florentine graver, the creation of a basket-weave texture, or stippling. Grahl explains that doing a convincing basket weave requires going over the pattern three times, first in one direction, then at 45 degrees to that direction. Stippling, explains Hall, is the process of using a graver with a pyramidal or needle point to make small cuts in the background. These cuts essentially create a light-trapping area, reducing reflections and creating a contrast which allows other, highly reflective areas to stand out. Expert engravers can use the technique to create subtle shading in an engraved surface.

Classical hand engraving takes a lot of hand, arm, and shoulder strength to hold the graver steadily and firmly against the metal as it's moved into the tool. However, the development of power-assisted gravers has reduced the strength necessary, increased the control possible, and is bringing new engravers back into the field, such as the GRS GraverMax and Lindsay AirGravers. These have significantly reduced the learning curve, too. "With a power-assisted graver and someone to lead the way," says Hall, "you can learn what you need in a few days."

Wielding a graver takes practice. "You need to take the time to develop your muscle memory," says Grahl. It's important not to try to do too much, dig too deeply, or use too much power when you make your cuts. "If your angle of attack is too steep, you use too much strength, or the graver is not sharp, you can skip off the surface," he says.

While you'll want to practice your technique on less expensive metals, be aware that they all metals cut differently, says Hall. "Copper can have a gummy feel to it. Some brasses are great to cut, others are difficult. The softer the metal, the more difficult it is to control the graver. It can dig in more readily. Metal that has some resistance to it can be easier to cut. It allows you to control the graver better."

In any work you do with a graver, whether or not you use a power assist, you must keep the graver sharp, says Grahl. "If it's not sharp, you're going to hurt yourself. The graver will skip and bite your finger. Much worse than the wound, the graver will gouge into another section of metal you didn't want to touch. And now you'll have to fill and/or address it cosmetically." Using a whetstone, you'll have to get into a habit of "cut, sharpen, cut, sharpen," says Grahl. "Most engravers test the sharpness against their thumbnail. You'll feel it bite if it's sharp enough."



ABOVE
Gravers used by Jim Grahl for engraving and texturing.
PHOTO: JIM GRAHL DESIGN

BELOW
Jim Grahl
Scales Earrings, Pendant, and Brooch
Hand-engraved
PHOTO: SYLVIA BISSONETTE

You'll also need a bit of tool savvy to work with a graver. Gravers are not perfect to use right out of the box, explains Grahl. You have to find the right handle, and then cut the graver to fit your hand properly. You may also grind the tip to shape it. If you get the graver too hot during cutting and grinding, it will lose the temper. Then you'll have to retemper the graver, a two-step process that involves heating to a dull red, quenching in oil, then gently reheating to a straw color, and quenching in water.

If you're interested in learning more about using a graver, there is a growing body of information available, says Hall. Check out Sam Alfano's igraver.com where you can learn about engraving and sign up for the Engraver's Café. Or go to Steve Lindsay's site lindsayengraving.com which also features his power-assist engraving tools. At both sites, you can see samples of superb engraving of all kinds.

SHARON ELAINE THOMPSON is a freelance writer based in Oregon. She has written for Lapidary Journal Jewelry Artist since 1987. You can learn more about her and read previous articles at jewelryartdiva.com.



**see
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work**
Their Turn
PAGE 8

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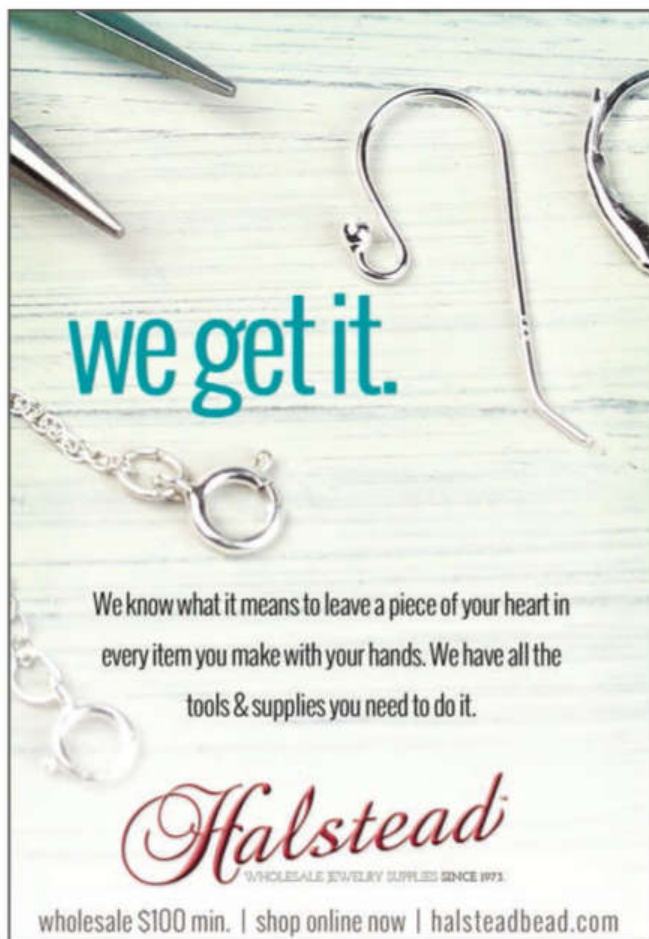
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By Deborah Yonick

Lunatic Fringe



The age-old style of tassels and fringe is still runway chic today

Season after season, there are some design trends that prove to be timeless, with fringe and tassel embellishments among the favorites. Fall fashions continue to sway to the rhythm of fringe, with applications that are fresh, modern, glamorous, artful, bohemian, and chic — embraced by brands like BCBGMAXAZRIA, Ralph Lauren, Mara Hoffman, and Tracy Reese. A great way to add texture and movement, the fringe element works on jackets and vests, dresses and skirts, shoes and handbags, and most definitely jewelry.

Tassel treatments have a long history as decorative elements, adorning homes and people as far back as ancient times. In the U.S., fringe ornamentation origi-



ABOVE
Rina Limor
Tassel Pendant
Black spinel,
diamonds, black
Tahitian pearl, 18K
gold

LEFT
Actress Margot
Robbie at the 87th
Oscars® in February
2015, wearing Van
Cleef & Arpels'
"Zip" necklace
with sapphire and
diamond tassel.

PHOTO: MARK
SUBAN/©A.M.P.A.S.

Throughout history, tassels were worn as symbols of love, protection, tribute, and prestige; used in Feng Shui to increase the flow of vital energy, comfort, and happiness.



Gumuchian
Cascade Earrings
18K gold,
diamonds
PHOTO: COURTESY
GUMUCHIAN



Sienna Miller at
the 2015 Golden
Globes wearing
Tiffany diamond
cascading
earrings.

PHOTO: COURTESY
PGI, GETTY IMAGES
WORLDWIDE



**Stephen
Webster**
Lady Stardust
Pearl Tassel
Bracelet
Black and white
diamonds,
emeralds

inspires style icons like Beyoncé and Taylor Swift.

RED CARPET READY

Throughout history, tassels were worn as symbols of love, protection, tribute, and prestige; used in Feng Shui to increase the flow of vital energy, comfort, and happiness. In Europe, beaded tassels first became fashionable in the Edwardian era and lasted well past Art Deco, resurfacing in the 1950s to '70s, and again in a big way with the turn of this century.

Not a fad, fringe and tassel is a leading jewelry trend on today's red carpet. At this year's Golden Globes, great examples were spied on A-listers like Jennifer Lopez in diamond platinum mesh earrings by Lorraine Schwartz; Sienna Miller in Tiffany diamond platinum linear cascading earrings; and Jennifer Aniston in onyx and gold fringe chandeliers by Neil Lane. Margot Robbie also rocked the Oscars in a statement Van Cleef & Arpels "Zip" necklace with sapphire and diamond tassel, fashioned after one owned by the Duchess

of Windsor in the 1930s.

Perhaps the most *fringe-tastic* show of tassel treatment was on display at the Metropolitan Museum of Art Costume Institute Gala in May. Despite its "China Through the Looking Glass" theme, with expectations high for lots of jadeite jewelry, the surprise trend of the night had fringe benefits. Standouts adorned in shoulder dusting earrings dangling diamonds, gems (emerald, ruby, sapphire), pearls, and chain like Uma Thurman in Anna Hu, Sienna Miller in Jacob & Co, Kate Beckinsale in Carrera y Carrera, and Chrissy Teigen in Fred Leighton.

Jewelry stylist to the stars Michael O'Connor cites the tassel trend blossoming after the 2011 Academy Awards, when Natalie Portman took home the Oscar for her role in *Black Swan* wearing Tiffany rubellite and diamond tassel earrings. "The tassel trend has been growing for quite some time and is being fueled by the trend toward jewelry pieces of larger proportion," he says. "This jewelry trend is dictated by fashion designers using larger fringes,

nated with the American Indian, who wore buckskins trimmed with fringe for rain repelling purposes. The trend went mainstream in the 1920s when it became the rage on cocktail dresses swinging to the Charleston and reflecting women's swagger for gaining the right to vote. It has since seen many style evolutions from rock and roll a la Elvis' fringed leather to Jimi Hendrix's hippie haute suede to Cher's western vest flare. Tina Turner brought metallic fringe center stage in the '80s as a diva fave that still



Honora
Fringe Earrings
Sterling silver,
freshwater pearls
PHOTO: COURTESY
HONORA



Goshwara
"G-One" Ruby
Tassel Earrings
Ruby, onyx,
diamond, 18K
pink gold
PHOTO: COURTESY
GOSHWARA



LEFT AND BELOW
Neil Lane
Fringe Earrings
Onyx, gold
Worn by Jennifer Aniston at the
2015 Golden Globes.
PHOTOS: COURTESY NEIL LANE



ruffles, zippers, and decoration on gowns and therefore jewelry needs to grow in proportion so as not to get lost." Fringed accessories were big on the spring and fall runways, most notably in collections by designers like Tom Ford, Lanvin, and Missoni.

FRINGE WORTHY

Fringe and tassels also fit in with the larger trend for jewelry with movement, loose links, lots of dangle, and also jewelry that transforms from ring to pendant, necklace to bracelets, cites Amanda Gizzi, director of public relations and special events for the Jewelers of America. Some designers are using tassel as an add-on detail for earring jackets to studs or extensions to pendants/enhancers.

Feminine and tactile, fringe design elements turn gems and metals into something more fluid that draws attention to the body as we move. "Tassels of gemstones create a bold look in a wide variety of price ranges," says Gizzi. "Tassels allow the gems to move and catch the light in a unique way. Tassel pendants of gold bead-style chains are modern, chic, and versatile."

Top jewelry choices embracing this trend include earrings in chandelier,

jacket, and cuff styles, as well as lariat and bib type necklaces, with lots of opportunity in body jewels that drape over shoulders, swing cross body, and dangle from wrist to hand. Favorite gems run the gamut from diamonds, emeralds, rubies, sapphires and pearls to tourmaline, garnet, topaz, moonstone, opal, coral, turquoise, onyx, and more.

"This trend allows designers to meet price points depending on the materials they choose," says O'Connor. "When thinking about the woman who will wear a tassel, specifically for everyday, remember tassel earrings that are too long can be cumbersome and limiting to wear. A jaw line length is what most woman of every age feel comfortable in. For women who want more drama, a length that falls halfway between the jaw and the shoulder will give great drama, but still keep the neck looking long and lean. Pendants with a tassel can be much longer and more dramatic, while still easy to wear."

DEBORAH YONICK has been writing about jewelry and fashion trends for more than 20 years for trade and consumer publications and online, and has loved both for much longer! With roots in New York, she presently lives and works in York, PA.

On the Fringe



DESIGNING
WITH A SHAPE

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Designing with a Shape

*How versions of an identical outline
can help you form a collection*

BY HELEN I. DRIGGS

SOMEHOW, USING A SURFACE

design or decoration is easy. We have all mindlessly doodled on paper to create designs that way. But when you are tasked with designing something, you're likely to freeze up.

Here's why: no limitations. Your creative mind goes into overdrive and you can't seem to focus on just the one thing, so you play with 10 ideas and you can't make even one of them and then you slam on the brakes. Sound familiar? It's one reason why most jewelry artists hate it when somebody says, "Oh, I don't know. Just make me something really cool." *Right.*



Designing is the creative act of intentionally producing something. Everything that isn't made by Mother Nature is designed by one of her minions. It isn't an accidental or magical process that comes from a mythic realm or divine being. It is a system of solving a problem in a creative way.

Design has rules. Rules are good because they help you hone in on whatever it is you need to produce. Lots of professional designers use simple tricks to help them focus when they work. They set fixed rules to get the juices flowing, and once they do that, very often the creative floodgates open. Then, they'll have the freedom and comfort to move about. At that point, they might not need those self-imposed restrictions anymore.

Jewelry is in a special class as far as design goes. It is supposed to be functional. It is small. It is 3D. You need to have mad skills to make it well. It is intimate and personal because somebody is displaying it on their body. Comfort matters. So does weight and texture and durability. All of these things affect the "rules" of design as you make jewelry. Creating an aesthetically pleasing object within these parameters is hard enough, but then you also want to create something that is different from everyone else's stuff. It's no wonder you freeze as you sit there looking at several hundred

dollars' worth of precious metal and stone on your bench with a zillion ideas running through your head, and then go play another round of "Angry Birds" instead. Don't despair. There is help.

Words are essential to design, even though it seems counterintuitive to describe a primarily visual experience using language. We must because humans communicate with words. Designers use common words like point, line, plane, and shape to describe the elements of a design. In this exercise we are going to use one — **shape** — to set some rules for the creation of a jewelry collection.

What is a shape? When lines are put together to enclose space, this is a shape — which can be geometric or organic. Shapes are two dimensional. Every time you saw out a flat piece of metal sheet with your saw, you've created a shape. Then, when you move the flat metal shape into space with a hammer, stake, punch or by soldering on more metal, that flat 2D shape becomes a 3D **form**.

Focus: Set Some Rules

I was asked to "create some kind of jewelry thingie that worked with one of the hot, current fashion and color trends." Um, wow. I immediately resorted to a web crawl, where I noticed tassels, fiber, fringe, and leather were showing up in fashion accessories

And More Tassels!



A Tasseled Collar,
by Laurel Nathanson,
*Lapidary Journal Jewelry
Artist*, April 2015

Available at
interweavestore.com

from many different directions. The Pantone color forecast said rich wine and jewel colors would be trending. Boho, ethnic, tribal and strappy, fringy clothes, handbags, and shoes were all over the runway earlier this year.

This was a good start, but how was I going to create a Bohemian inspired, fiber, leather, wine-colored, and metal sort of jewelry object on deadline that fit the bill? I sketched, I thought, I worried about not being in my particular comfort zone — see what I mean about no limitations? It was clear I needed to focus myself, so I created this set of guidelines to work within.

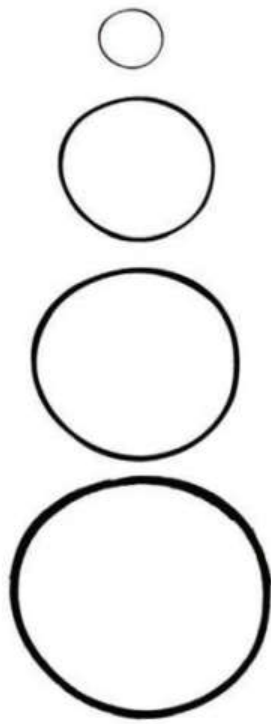
1 Fiber + Leather + Metal

Since this was the prime directive for my assignment, I trotted over to the big chain fabric store and chose some wine-colored yarn with nubs and slubs and rich hits of orange and maroon. Since metal is my thing, I already knew I wanted to use thick gauge patinated copper for all of these pieces. I also had some muted, recycled kimono silk and cotton strips in shades of olive and grey green lying around in the sewing room.

Since greens are the complementary color (across the color wheel) to the Pantone wine colors and also to the earthy red copper I wanted to use, this would create **color harmony** across my collection. And I also scored big with some rich brown recycled leather from an old chair cushion my neighbor was throwing out because she has a bad dog. I figured I could put that to good use somehow.

2 One Shape Metal For Every Piece

This is where continuity in the collection using **repetition** comes in. First, I sawed out a circle of copper. I love circles, but when I looked at it, it was too geometric-perfect to convey the Boho, ethnic, or tribal trends. So



I annealed the metal and ran it through my rolling mill to stretch it and distort its perimeter. Then I used a mallet to make it flat again.

Bingo! Now, I had a pleasing, somewhat circular organic pattern shape to start from. I traced it off on some paper and made several photocopies of the pattern in different sizes appropriate for a necklace, cuff, brooch, and ring.

3 Make Some Tests Before You Commit

My first test was to cut some small versions of the shape out of metal scraps I had on hand, just to play. I know myself. I need at least an hour of playing around at my bench pin just to get my head on straight, so I gave myself the time.

After sawing, I cut some slits in the metal for threading the fabric strips through, then gently domed the metal in a wood forming block. The non-circular organic shapes were awesome when domed, so I added fabric and was pretty OK with how everything was working.

As I thought things through, I saw there was an option to build on the designs by adding texture, stacking more metal, adding stones, buttons or other objects

amongst the pattern shapes, and I ultimately decided to hang the test ones from a handmade wire fibula pin, much like a military badge. I liked the edges of the distressed cotton, and added a green cotton cord at the bottom to create a tassel.

I also realized during all this that it was important to pay attention to the smooth metal edges — because I needed to protect the delicate fiber from cutting or excess wear. Another potential problem area was that those slots for attaching the metal needed to be in different locations based on what the jewelry object would ultimately be. I learned a lot by taking the time to experiment with scrap metal tests, and it got my mind in the right place to move forward. Test round? Finito. It was time to get to work.





How I Developed the Boho Concho Collection Concho Necklace with Colorful Yarn

TOOLS USED: Jeweler's saw, file, metal design stamps, wood forming block, hammer

This one's a simple, stamped, no-solder piece with minimal metal forming.

Photo 1 I sawed out 18 gauge copper sheet (largest pattern) and used some metal stamps for texture. Then I cut two narrow slots in the upper third of the piece for the fiber to pass through.

Photo 2 After sanding, filing, and cleanup, I domed and patinated the shape.

Photo 3 I added some thick 14 gauge copper wire wraps to the back of the fiber strands to permanently bunch them together, and I added some African copper beads I had lying around to the ends of the fringe.

Recycled Leather Cuff with Faux Coral Branch

TOOLS USED: Leather punch, X-acto knife, tapestry needle, jeweler's saw, file, metal design stamps, wood forming block, hammer

This cuff starts off with the same size pattern and process as the necklace, but I moved the slots to the middle. The leather cuff was once the edge of a chair cushion; all I did was deconstruct it and cut the distressed leather to size.

Photo 4 I punched parallel rows of holes to sew the cotton cording through with a big tapestry needle.

Photo 5 I then folded over the raw edges and glued them with E6000 to encase the raw fiber edges and let them dry overnight.

Photo 6 Square knots secure the coral branch and copper concho to the cuff. I felt guilty about using leather, but it was good that I recycled from the trash. Ditto for the coral guilt, kids — it's really well-done plastic, so don't shout at me!



Fashionable Tassels



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TRENDS



Copper and Sterling Ring

TOOLS USED: Jeweler's saw, file, metal design stamps, wood forming block, hammer, torch setup, ring mandrel

Photo 7 This piece breaks the rules only in terms of concern for durability, but still fits design-wise into the collection. It uses the smallest circle pattern, and I made the concho with just one slot for the ring band to insert into, by measuring the finished band for the slot width. That's 10ga. sterling round wire.

I had intended to knot some fiber (and may still) through the section of the ring band that sits above the domed concho, but for now, I left it just metal because I couldn't envision successful hand washing while wearing it. Perhaps synthetic fibers would do the trick here, but I got too close to my deadline to try them. Maybe next time.



Copper and Kimono Silk Brooch

TOOLS USED: Jeweler's saw, file, metal design stamps, wood forming block, hammer, torch set up

This is the most complex piece of the group, and I was blessed by the patina gods on that delicious green. By now, I was comfortable with the doming process and the shape, so I went all out.

First, I sawed and domed the concho and created a hammered wire, square soldered frame for it to rest in. I soldered on some brass tubing at the back of the wire and used steel music wire to fabricate the double pin stem. Jax solution sealed with Renaissance wax gave me the glorious green patina. Those strips of kimono silk are hand sewn using silk thread and an upholstery stitch so they remain hidden. Believe it or not, the metalwork was a snap



— getting the correct tension on the silk to not cause creases was the most difficult part of making this piece. I am very pleased with it and intend to make more of these.

So, that's a wrap. The next time you get stuck, set some design rules for yourself and play by them for a while. I can virtually guarantee if you choose one shape and riff on it, you will become unstuck in no time, plus you'll have an entire collection of pieces to show for it.

HELEN DRIGGS is Senior Editor for Lapidary Journal Jewelry Artist and an experienced metalsmith and teacher. Follow her blog: materialsmithing.wordpress.com; Instagram feed: [hdriggs_fabricationista](https://www.instagram.com/hdriggs_fabricationista); and Twitter feed [@fabricationista](https://twitter.com/fabricationista) for more jewelry making fun.

A background image showing various jewelry-making tools and materials. At the top, there's a wooden mallet and a metal tool. Below, there are several pieces of jewelry: a large green bead, a gold chain with a red gemstone, a gold ring with a diamond, and some metal plates with gemstones.

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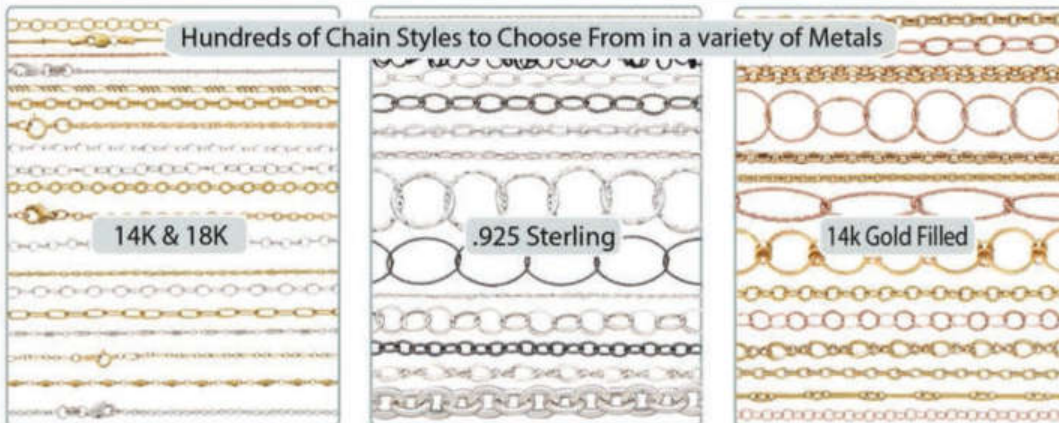
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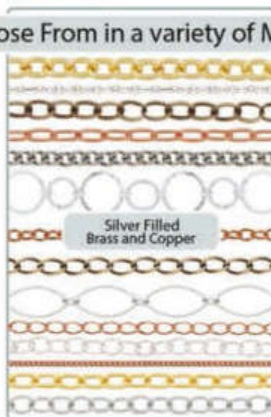
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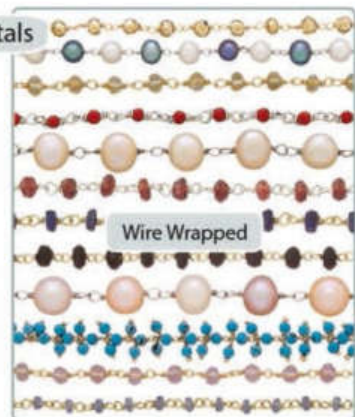
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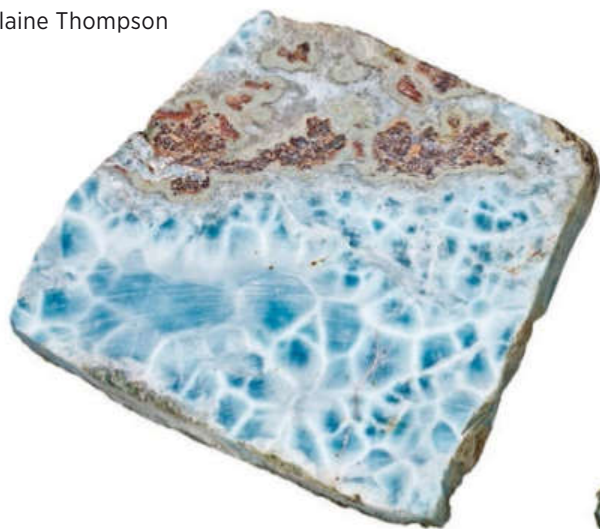
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By Sharon Elaine Thompson



Larimar



LARIMAR IS ONE OF the newer entries into the gemstone market. An unusually colored pectolite, its lovely blue is the result of the presence of copper in the stone (as is the case with turquoise and chrysocolla). It is not believed to be treated.

Only found in a volcanic mountain range in the Dominican Republic, Larimar provides the local economy with a cottage industry of mining, cutting, jewelry manufacturing, and merchandising. You can enjoy Larimar not only for its color, but for the pleasure of knowing you are supporting a small community.

This lovely blue stone often has a “sleepy” look due to the fibrous nature of the pectolite. It would pair beautifully with labradorite beads with a blue iridescence. While often set into silver, it would show very well in gold.

Because it is sold by the gram, beads, when available, can seem to be expensive. If you invest in a strand, you may want to break it up and mix it with other materials.

You can enjoy Larimar not only for its color, but for the pleasure of knowing you are supporting a small community.

How much does it cost? Slabs, \$1.00-\$7.00/gram; cabs, \$3-\$16/gram. Bead strand, \$400-\$600/strand. Stones that are darker blue and less fibrous are more expensive.

How hard is it to find? Because it is mined by hand, there are not huge quantities on the market. However, John Bajoras, of Village Silversmith in Gloucester, Massachusetts, specializes in Larimar and is confident a few stones can be found at almost any gem show.

What kind of jewelry can I put this in? Chatoyant material is softer, and while Larimar may be better in earrings and pendants, rings are also very common.

How easy is it to set? Cabs are somewhat high domed, but should present no difficulty for those experienced in bezel setting.

What settings are best for this stone? Bezels are best, though prongs can be used.



Artisan/studio dos and don'ts

Cutters: Do rough grinding with a medium, not coarse, grit stone, advises Bajoras. Coarser grits can pull material off due to the fibrous nature of Larimar. **Jewelers:** Larimar fibers may pick up dirt from polishing; polish like you would jewelry set with pearls or turquoise. Avoid the ultrasonic. Although the stone is said to be photosensitive, Bajoras reports he has noticed no fading on the pieces he has displayed, even in sunlight.

Wearer dos and don'ts For the most part, wear and enjoy. Larimar set in rings may wear more quickly if worn every day by someone who uses her hands. But it should still meet the customer's expectations for enjoyment, says Bajoras. Thanks to John Bajoras of Village Silversmith in Gloucester, Massachusetts (villagesilversmith.net) for his help with this column.

SHARON ELAINE THOMPSON is a freelance writer based in Oregon. She has written for *Lapidary Journal Jewelry Artist* since 1987. You can learn more about her and read previous articles at jewelryartdiva.com.

Set It



PECTOLITE AND PEARL PENDANT

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SKILLS

- Lapidary
- Soldering
- Fabricating
- Polishing

TIME IT TOOK

9 hours

Pectolite & Pearl Pendant

Combine soft peach and restful blue in a gorgeous design

BY JOHN F. HEUSLER, G.G.



THE OCEAN comes to mind when I look at blue pectolite. When I work with this stone (AKA Larimar), I am reminded of many trips to exotic places, and it represents what I feel when I travel to a faraway land. What other reason or inspiration would I need to build this piece? I always build everything from a basic idea, and then I change my mind along the way nearly every single time. I love to sketch my pieces first and then see how much they changed by the time I complete the piece.



Cut the Stone

Photo 1 Select a slab and draw desired size and shape onto the slab with a Sharpie ultra-fine point marker.

Photo 2 Cut out the shape with a lapidary trim saw or use a Taurus 3 Ring Saw®.

NOTE: I like the Ring Saw because it saves so much material. When the material you save is rare and valuable it's well worth it! Blue pectolite is an $\text{NaCa}_2\text{Si}_3\text{O}_8(\text{OH})$, sodium calcium silicate hydroxide. This forms in the triclinic growth system and is quite fibrous. Care must be taken to cut this gem.

Grind down slowly with the 280 wheel to the girdle outline of the shape you wish to cut.

NOTE: If your wheels are too aggressive at this stage the stone will splinter the fibers (much like pinolith;

see *Lapidary Journal Jewelry Artist*, August, 2015). Some cutters use a cyanoacrylate glue to hold the stone together while cutting. I do not. I like to bevel the edges before grinding down to the final shape. This helps slow and or stop splintering if glue is not applied. Cutting on the 280 wheel will make for a lengthy time cutting. If you get impatient and go to a more aggressive wheel, then you will have to use super glue and/or bevel the edges.

Photo 3 To gain the convex curve lay the stone against the wheel at a 90° angle and cut to shape. (The template I designed is designed to be used with 4 or 6" wheels.)

Photo 4 Once the girdle shape is precisely the size and dimensions you want, start to bevel the edges by 50% of the thickness of the cab at a 45° angle.

Pectolite/ Larimar?



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38

SMOKIN' STONES

MATERIALS

Pectolite (Larimar) rough or slab; or purchased cabochon if you aren't a cutter

Sterling silver flat wire 6mm x perimeter of stone x 13 gauge

20 gauge sterling sheet — enough to back the stone and make the leaf; about 4"

2 x 2mm square sterling wire; 6 inches to roll out to about 12 in the mill

18K tubing or metal of choice

Round diamond to fit the tubing — I used a .25ct diamond

TOOLS

LAPIDARY: Lapidary unit (Genie® from Diamond Pacific Corp was my choice), trim or ring saw, lapidary polishing compound (cerium oxide works well on blue pectolite), gemstone templates or a freehand design

BENCH TOOLS: General bench tools, Fretz® 5 Forming Stake Set or other tools that will fit the shape needed

OTHER: Liver of Sulfur, Chinese White

SOURCES

Hauser and Miller Co. custom makes sheet and wire sizes in all precious metals. The gemstone templates are from slabstocabs.com. Most of the other tools and supplies in this project are available from well-stocked jewelry supply vendors, many of whom can be found in our Advertisers' Index, page 71.



5



6



7



8



9

Photo 5 Cut a shallower beveled edge towards the table (top) of the stone all around. Continue until you have 3-4 beveled and shallower edges until you reach the top. This should all be completed on the 280 wheel. Next rotate the stone in a circular motion as well as up and down to smooth out the beveled edges. You should end with your stone being exactly the right size and shape, with a nice rounded dome on top.

Continue on the 600 wheel with the same rounding motion, removing all scratches from the 280 wheel, then the 1200 wheel and remove the 600 wheel scratches, finally heading into the 3000 wheel. You should see a nice smooth stone with a decent polish — when you rotate the stone in the light, you should see a smooth reflection; when you rock it back and forth, you should see a rounded dome without flat spots.

Polish the stone on the end lap using rough leather and cerium oxide polish. Do not apply too much polishing compound!

TIP: Most beginners try to cover the entire wheel with compound. Instead, spray the wheel with water until it is saturated. Spray your fingertip and touch it to the cerium oxide and then touch the leather lap in a dotted pattern. Wet the wheel again and start to polish.

Fabricate the Pendant

Photo 6 Anneal the sterling wire using your torch. I decided to start at the apex of the cabochon bezel because, with such a heavy gauge metal, I thought it would be nearly impossible to bend it around the point of the stone.

Photo 7 Bend the edge of the bezel wire very slightly at the top edge. This is difficult to do with bow pliers, so I used my ring mandrel and a rawhide mallet. I made the curve longer than what I needed to make the join for the other side of the bezel. Continue forming with bow pliers and your hands to make as close a fit as possible. Once it is looking perfect, use a light source behind the stone to see any minute gaps, and form the bezel closer using the backlit method. Leave quite a bit more bezel wire than you need at the bottom, as we will do something fun with that soon!

Photo 8 Fit the adjacent side with the bezel wire and solder at the top using a butt join for strength for later soldering on a bail. Make the final bezel fit properly without gaps. You want the stone to slide in and out without stretching the bezel out of shape. If you used the heavy gauge like I have here, it will not flex easily and so be less of an issue, but as I say, it has to fit just right.

Photo 9 Once the bezel fits perfectly, solder it closed with hard solder, then sand to 600 grit. Place the bezel on a flat surface to see if there are any gaps that will not lie flat on the sterling back plate.

HOW DO YOU ANNEAL?

Here is Pat Quint from Hauser and Miller Co in St. Louis on this frequently asked question:

Anneal sterling with a torch using oxygen and natural gas. Propane will work just as well. Acetylene imparts oxides into the metal that will promote fire scale but will also work. Turn the overhead lights out so you can see the color of the metal as it heats up. When it reaches a *dull* red that you can see, cool slightly and pickle.

Pat has the best luck this way getting metal dead soft, for all precious metals including white gold. I asked him why white gold

needs to be air cooled and pickled after you can safely touch it by hand. He said yes, that is the traditional method, but he gets great results pickling right away on all golds. "Let sterling silver cool for a short period of time, about the time the redness dissipates, then pickle. On karat golds, quench in pickle as soon as you put your torch down."

Please note that this method will cause a larger splash as the metal instantly cools in the pickle with this method. Make sure you have a well-ventilated area as well as a work surface that will not deteriorate with Sparex® splashing!

TIP: Sometimes I staple a sheet of 120 or 220 grit sandpaper to a board and hand sand the entire back flat, which is much easier than trying to do with sanding sticks that are less than 1" wide.

Photo 10 Before soldering on the back plate, check the depth of the stone to see if it fits too deeply in the bezel. I like to cut the points of gems down a bit. It gives it much better dimension but is more difficult to set. I like the tradeoff here. Sand or file down to the appropriate setting depth. As I intend to cut out a design on the back and let the stone show through, I would not use a shim under stone.

Photo 11 File the flat bezel at the end to an S curve. Round it from soft round at the stone side to full round at the tip. Taper it as well.

NOTE: You may perform this step before or after you solder to the back plate. I did it before and raised up the metal so it would not solder down to the back.

Photo 12 Firecoat, flux, and solder the back with hard solder. Pickle and rinse. Inspect, resolder if needed. Normally, I raise the piece up in my third hands, but sometimes large pieces can get warped, so I used the flat section of my charcoal block to hold it flat.

Photo 13 Saw out the piece, sand with

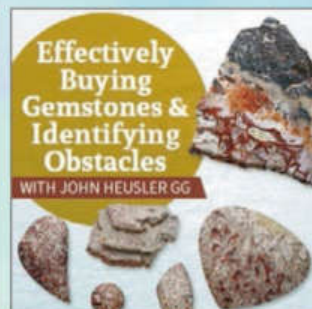
a rotary file, then hand sand up to 600 grit. Polish at least to the Tripoli stage.

NOTE: Do you sand in a single direction? Do you sand the next finer grit in another direction? If you don't, you should! You will easily be able to see the scratch marks from the previous sanding stages this way and will make for a faster clean up. You won't have to go back a stage or two to remove those pesky gouges once you get to your final grit! What is my final grit? 600. I use 220, 320, 400, then 600, if you must know. Now, go polish the bezel to the Tripoli stage.

Photo 14 For this section of the piece I relied on going back to my roots from the 1970s. A leaf is a standard in Native American designs, and I used them extensively back then. Apply "Chinese White" (a watercolor paint available from fine art supply stores) on the metal using a wet finger or a paintbrush. Now, you can draw on the dry paint with a pencil very easily, a technique used in hand engraving. If you need to erase a poorly drawn design, simply apply more Chinese White and redraw. Note that it will rub off easily, so take care not to touch it as you are stamping or cutting.

Photo 15 Stamp with a curved chisel along the veins you drew.

Buy or Cut Your Own



For John's advice on selecting and buying stones, check out his on-demand web seminar, "Effectively Buying Gemstones and Identifying Obstacles."

Learn to cut and set with the Ultimate Cabochon Cutting and Setting Collection.

Available at shop.
jewelrymakingdaily.com.





16



17



18



19



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21

Photo 16 Where do you stamp? It will look best if you do not stamp to the center of the leaf. Make sure the curve of the veins are flowing in the correct direction. After stamping, you will use a half round file, #2 cut to finish up the edges of the leaf. I round mine just in certain areas. We will apply the vein in the center with round wire, although some folks stamp the vein in and I like that too, but this gives the dimension I wish to have.

Photo 17 I used a scrap piece of round wire that is about 19 gauge. (I draw all my own wire so that is why I have an odd size.) 20 is fine but 18 is a tad thick. Apply firecoat and flux, then add solder to the bottom of the wire. Yes, I used hard solder and not very much of it. Apply in 4-5 sections along the wire and heat until it flows. Lay the wire along the center of the leaf and heat until it flows. Here those nifty little clips made out of titanium would be handy to hold the wire in place.

Pickle, rinse, and inspect. Resolder if needed. Cut off the end of the leaf but leave enough to solder to the "vine" bail and polish to at least the Tripoli stage.

TIP: An easier way to build the leaf? If you work in metal clay this leaf can be done in 5 minutes. Fire it and solder it on. If you work in wax you can cast it, but that will take a lot of extra time.

Photo 18 Curve and dome the leaf over a stake that gives you the shape needed. Here I used a small Fretz® stake from his Set #5 Forming Stake and a rawhide hammer. Fit it to the side of the bezel.

TIP: If you place your stone into the bezel prior to saw piercing the back, you may get it stuck which will allow you to let expletives fly. In this case, use dental floss to lay over the bezel and

then place the stone in over the floss. Pull it out easily with the floss.

Create the Leaf Detail

Photo 19 Start the "vine/bail" wire with square 2 x 2mm wire, and roll a lot more than you think you will need, about 8"-12" or more. You can always cut some off the end. You'll want to roll out just the end of the wire to a nice taper.

Close the rolling mill to where the rollers touch. Find the section where the wire will not pass through on its own. Roll in *only* about 2" and roll back out the same way it went in. Rotate 90 degrees and repeat. Place the wire into the next smaller slot and roll it to 1.5", rotate 90 degrees and repeat all steps into the next smaller roller until the wire is tapered nicely.

Photo 20 File and sand it round then polish to Tripoli stage. This will be your bail wire and will also attach to the leaf and the pearl. Forge the bail and taper to the other end to hold the pearl. We will solder the tapered end to the vein of the leaf but not until we solder on the leaf and the bail.

Stamp and hallmark the back of the pendant at the bottom as low as you can. Eyeball it to make sure it will be straight when the pendant hangs naturally from the chain or neck wire. Leave enough room to saw out a design on the back if that is your choice.

Create the Textured Bezel

Photo 21 Cut the bezel in equidistant "prongs" to facilitate setting the cabochon. If you wish to keep a solid bezel, you will have to chase the bezel in with proper chasing tools. Saw to about 40% of the way through the depth of the bezel and about a sawblade's thickness

down the bezel's sides.

You can use dividers to mark off where to cut for prongs, or you can eyeball it. I used to mark them off, but found that if I eyeball it, I can get it done in $\frac{1}{3}$ the time and it still looks great, so now I eyeball it. Mine are approximately 1.5mm apart, but 2mm will work well, too. Any closer, though, and you run into a lot more work, and it will look too busy. Any farther, they will be too difficult to roll over the gem. The larger the stone, the farther apart you can make these divisions.

The key to making them look good is to make them perpendicular to the bezel. If your stone is round, they should all point to the center of the circle. With odd shapes, make the cuts parallel and they will look good. Are mine perfect and parallel to each other? Not all of them, no, but pretty darn close. You will be surprised how great they will look even with mistakes! When finished, sand to 600 grit and polish to the Tripoli stage.

Saw Pierce the Back Plate

Photo 22 Decide on a design to cut out on the back if that is your wish. I always do this because it gives me a chance to add something personally meaningful to the piece. This gem reminds me of the ocean at the Great Barrier Reef, where I love to go scuba diving. It's a favorite place with beautiful palm trees, so I also used a Native American symbol for water under the palm tree. Water gives us life and the palm tree gives me, at least, a calming feeling like an island breeze. And sawing out a design will also help us push the stone out once we place it in — if it's

somewhat snug. Always thinking!

Photo 23 Apply Chinese White watercolor to the inside of the bezel. Draw a design, then drill the proper size holes, insert your saw blade, and start cutting the design out. I did pierce out the water wider than a saw blade's thickness.

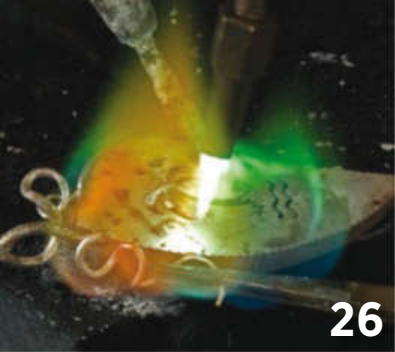
Remember, it is always best to let the saw do the work. Never force it. With metal this thick, you must saw absolutely straight up and down or the bottom of your design will be distorted.

"Pre-push" the prongs only under where the leaf will cover the bezel. You will not be able to get to them after the leaf is soldered in place. Make sure you do not push too far!

Photo 24 Solder the leaf on the bezel where it touches with hard solder. Adjust the leaf to fit the nice curve of the bezel/stone if you have not already done so. Make sure you left room for the gem to slide into the bezel but just barely. After it is set, we will push the leaf down over the stone. Pushing the leaf over the gem will also push the prongs into the stone, so make sure you have a good fit to begin with.

Photo 25 Fabricate the bail that will attach to the leaf and the pearl, starting with the tapered side. Bend and curve it to your liking, with twists and bends in many different directions to make it appear organic. Think of a grape vine that is growing intertwined around other leaves and vines. You cannot do this wrong, and it is why we made a long wire. Once the center of the bail is complete, taper the other side in the rolling mill as described earlier. Sand round and polish, then finish the pearl side.

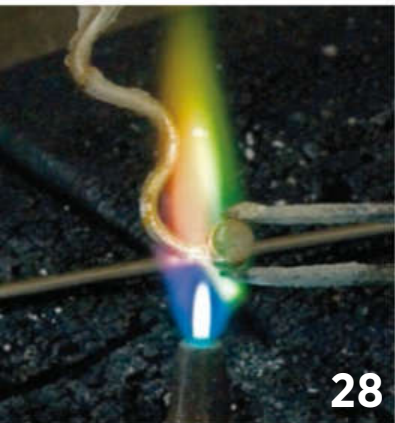




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Photo 26 Soldering the bail on the pendant is easier said than done. You must protect the thin wire from melting while heating the much heavier main pendant. I did this by holding the thinnest areas with tweezers to act as a heat sink. I used hard solder but you may wish to use medium. I have not used medium solder in 5 years, let alone easy! Heat the pendant until the solder is about to flow, then apply the bail. Next we will solder the bail wire to the leaf. Feather the wires together after soldering with a #4 cut needle file. Sand where needed and polish up to final rouge stage.

Tube Set the Diamond

I used 18K yellow gold tubing, but you may of course use sterling instead. Cut a piece of tubing that fits the diamond perfectly — meaning that the ID (inside diameter) is smaller than the stone and the OD (outside diameter) is larger than the stone. Sometimes it is difficult to find such tubing.

TIP: I have found only one precious metal supplier that really caters to jewelry makers, and that is Hauser and Miller Co in St. Louis. They carry an extensive line of metal products in gold, silver, and platinum and will offer you services like custom orders for special sizes of metals. They will take the time to “fit” your diamond perfectly. Check them out to see for yourself.

Photo 27 Find a setting bur that is the same size as the diamond. Put the bur into a pin vise. Place the tubing into the flex shaft. **Do not overtighten!** You may crush the tubing, especially if it’s 18K. Rotate the tubing/bezel at a medium speed and apply the bur. Cut the seat just deep enough to allow you to roll over the edge of the bezel to hold the diamond. Covering about 10% of the diamond’s crown is just about right. If you cut too deep, you will cover too much of the stone upon setting . . . so, if you did cut too deep, simply sand or file down until the proper height is attained. This can be done while it is in the flex shaft. Spin it while sanding it!

Photo 28 To lay the bezel over the diamond, use a burnishing tool and rotate the bezel while pressing in towards the diamond. Once the diamond is tight, you need to back burnish with a flat bottom graver to clean up the inside edge.

Photo 29 Solder the bezel on the end wire. The cool part is that the diamond will make it through this stage just fine! Make sure you use a supersaturated solution of boric acid powder and alcohol in a 50/50 mix. Apply well to the bezel set diamond to protect it from the heat of the torch.

NOTE: Very few stones can be heated like this. No matter what anyone says, it is not safe to heat on any stone but diamond and only after it is properly fire coated. Other gemstones can and will change color if they were not destroyed after soldering.

Polish the entire piece to the final stage. Heat up some wonderfully smelling liver of sulfur and immerse the entire piece until the metal has darkened to your liking. Notice the gold bezel is unaffected by this method of oxidation. Polish the bright areas and leave the lower areas dark. I love this look!

Photo 30 Setting the center stone is easy peasy. Seat the prongs by pushing them over the stone. Use a chasing tool and chasing hammer with even blows on each prong. This won’t take much cleanup, so just sand with rubber abrasive wheels.

Photo 31 You can also roll out a very thin piece of copper and lay that against the stone to protect it while you are using the abrasive wheels. Give a final polish and show it to your neighbor. They will think you are really cool . . . because you are!

JOHN F. HEUSLER, G.G. owns a fine art gallery and a jewelry design school, Heusler Academy of Jewelry Design, in Chesterfield, Missouri. John is a gemologist, master goldsmith, and a lapidary and has been cutting gems and hand-making jewelry for over 40 years. He offers his designer cabochons in Quartzite and Tucson and on his website, slabstocabs.com.



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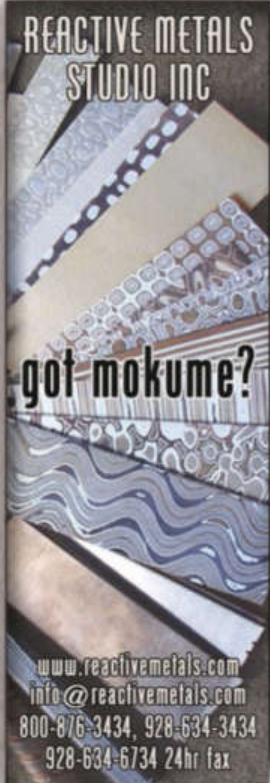
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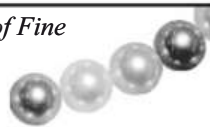
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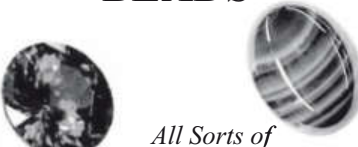
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Tucson, AZ.....September 10-11-12-13
Minneapolis, MN.....September 27-28
Livonia (Detroit), MI.....October 2-3-4
West Springfield, MA.....Oct. 9-10
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Orlando, FL.....January 8-9-10
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SKILLS

- Sawing and piercing
- Carving sterling silver sheet
- Finishing

TIME IT TOOK

8 hours



**AN
EASIER
WAY**

See page 50



Saw Pierced Fern Leaf Cuff

Use nature as inspiration for your jewelry making patterns

BY BETSY LEHNDORFF

SQUIRRELS PERCH ON MY WINDOWILLS,

deer congregate around the bird feeders, and ferns have replaced the lawn in front of my house because I don't mow. Such is life in the wilds of Northeast Michigan, where I am up to my pierced ear lobes in nature. Naturally, a selection of these motifs now appears in my jewelry designs, especially bracken ferns (*pteridium aquilinum*). They are about the only plants here that deer don't eat, and they are tough. If you slap a couple ferns on a copy machine and print 'em out, you'll have nature-inspired patterns to turn into earrings, pendants, brooches, rings, and this sterling silver cuff.

1



Design the Cuff Pattern

Photo 1 Bracken fern fronds are triangular in shape and consist of a stem and 20 or more leaflets narrowing to a point at the tip. Each leaflet is made up of subleaflets and varies in size. For this project, you'll need one leaflet about six inches long. Place the leaflet face down on the surface of a home printer/scanner. Cover with several sheets of paper and a book to

2



3



flatten the leaflet. Print several copies, making adjustments until you get a sharp image. Or scan the fern, copy to your computer, and edit to the size you want. Using scissors and glue, you can cut and paste together the printed leaves to make them as long or as short as you need.

Photo 2 Trim away excess paper around your leaflet printout, leaving a slight margin.

Photo 3 Use the cutout as a template and position it on your sheet metal, saving as much of the scrap in one piece as you can for use in another project. Draw an outline of the leaflet on your sheet with the black marker.

MATERIALS

16 gauge sterling silver sheet
about 3"x6"

Ferns

No ferns in your area? Check my website at HubbardLakeSilversmiths.com and click on the Ferns tab. I've posted an assortment of leaves you can copy and print out.

TOOLS

LAYOUT: Copier paper, scissors, black marking pen, general purpose mounting spray adhesive

HAND: Visor or safety glasses, cartridge/filter respiratory protection face mask, bench pin, jeweler's saw frame, saw lube, jeweler's drill bits, two dozen No. 6/0 jewelers saw blades, spring-loaded center punch, flexible shaft and hand piece, sheet metal vise and extra clamp, ring file, needle files, non-marring mallet, bracelet mandrel

ANNEALING: Clean soldering surface, good ventilation, large torch, copper tongs, quench

FINISHING: Bench polisher or polishing mandrel and buffs; Tripoli polishing compound; toothbrush and hot, soapy water; one box each of Moore's 3/4-inch snap-on abrasive disks in medium, fine, X-fine, and XX-fine; mandrel; masking tape; knife-edged silicone wheels with mandrel.

SOURCES

I buy my sheet silver from G&S Metals of Ann Arbor, Michigan, because they have a generous recycling program and are in state. Most of the other tools and supplies for this project are available from well-stocked jewelry supply vendors, many of whom can be found in our Advertisers' Index, page 71.

AN EASIER WAY



Worried about investing in a large project and new technique? Then start small. Try sawing and carving a pair of earrings or a pendant out of 22-gauge sheet sterling silver, using smaller leaf patterns.

Design Start

I discovered at a jewelry show last summer that people's eyes were drawn to a pair of earrings I made out of fern leaf patterns. So I made a collection of fern jewelry and discovered they sell well in Michigan.

Design Challenges

- Detailed sawing can strain hands and patience. Keep plenty of blades on hand and use lube. Take breaks, stretch, and relax. Let yourself slip into the Zen of sawing (and blade breaking).
- You can carve a lot of detail into sterling silver using Moore's sanding disks and medium or fine silicone wheels.

Design Features

This fern leaf motif can be used for other jewelry designs. The pattern also showcases the liquid beauty of sterling silver.



Photo 4 Cut out a sterling blank with jeweler's saw and No. % blade.

NOTE: A finer blade means a smoother cut. Use lube frequently when the blade seems to drag. Finish blank by using a Moore sanding disk and handpiece to remove burrs from edges.

Photo 5 Place the blank on a soldering surface and anneal with large torch. Pick up with copper tongs and quench in water.

Photo 6 Apply adhesive to the back

of paper leaflet pattern and press it securely onto blank. Allow the adhesive to dry.

Photo 7 Using the black marking pen, widen the center of the leaflet stem to make the finished bracelet stronger. Add connecting lines between subleaflets about $\frac{1}{2}$ to $\frac{1}{4}$ inches in from the tips. These "bridges" provide stability to the piece as you saw and shape the metal, and they will become part of the finished design.



ONLINE RESOURCES FOR FERNS

Check out the online images of Anna Atkins, an English botanist, who began capturing solar silhouettes of plants in 1841. Or go to:

- hardyfernlibrary.com.
- gutenberg.org/files/11365/11365-h/11365-h.htm
- en.wikipedia.org/wiki/Bracken#mediaviewer/File:Pteridium_aquilinum_nf.jpg

Photo 8 Use a spring-loaded center punch to create a tiny dimple in the metal inside each of the bridges you have drawn.

Piercing and Sawing

Photo 9 Fit a small drill bit into your flexible shaft handpiece and drill through each dimple. Apply lube to bit for each hole. When done, remove burrs on the back with a sanding disk.

Photo 10 Place the blank in a sheet metal vise and add an extra clamp to prevent shifting. You will pierce out the interior sections first. Thread the saw blade through a drill hole, secure the bottom end to the saw frame, and tighten the tension. Lube the blade and saw carefully to remove the section bounded by the black lines. Reposition the blank in the vise as needed to reach all areas. The leaflet pattern I chose required 28 holes and took two hours and eight blades to pierce out.

Photo 11 Feel like you need three hands to thread and tighten the saw blade? Try this: thread the blade through hole, and let the saw frame hang. That way, your hands are free to finish tightening the blade.

Photo 12 Cut the sheet metal away from the outer edge of the subleaflets. This took about 45 minutes. Soak the blank in hot water and rub away the paper pattern with your fingers. Remove any burrs with sanding disk. Hallmark the back of leaflet.

MOORE'S EMERY SANDING DISKS

Coarse → 150 grit

Medium → 240 grit

Fine → 320 grit

X-Fine → 400 grit

XX-Fine → 600 grit

Carving the Sterling

Photo 13 Place the blank on the top of your bench pin. With the ring file, carve back the top edge of the sheet metal at the base of the leaf, "breaking the edge" and creating a slope. Repeat with the individual leaves and tip, removing the metal with your file.

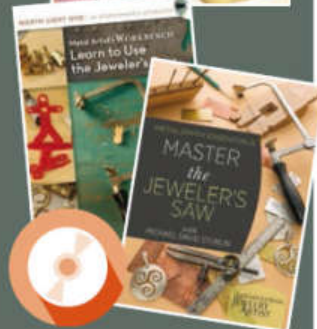
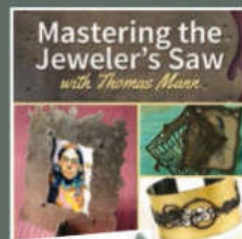
MORE SAWING RESOURCES

Betsy Lehndorff used the jeweler's saw to create intricate fern and leaf patterns. If you want to more about using a jeweler's saw from the masters, check out these resources:

■ **Mastering the Jeweler's Saw with Thomas Mann (OnDemand web seminar).** Available now at bit.ly/MannSawWebinar.

■ **Metal Artist's Workbench: Learn to Use the Jeweler's Saw with Thomas Mann (video).** Available now at bit.ly/MannSawVideoLJJA.

■ **Master the Jeweler's Saw with Michael David Sturlin (video).** Available now at bit.ly/SturlinSawVideoLJJA.





#1 Design Challenge

This cuff is a workout and the first one was a challenge to make a year ago. But it got a lot of attention and sold quickly.



#1 Construction Challenge

Sawing and filing are hard, but I obtained a sheet metal vise which reduced some of the strain. Because I knew a beautiful cuff would emerge out of my scratches and gouges, I relaxed and took my time.

Photo 14 Place the cuff blank back in the sheet metal vise and secure again with the clamp. Use a half-round needle file to coarsely refine the tips of the leaves. Carve valleys between the leaf tips and bridges with the triangular needle file. Filing took me over an hour.

Photo 15 Put on a respirator. Use a medium snap-on sanding disk, and begin to round out and refine the tips and sides of the leaves. These disks can sometimes grab and tear. Just replace the disk and continue working slowly, watching your progress. When done with this pass, scrub the blank with a toothbrush in hot, soapy water. Repeat with fine (320 grit), X-fine (400 grit), and XX-fine (600 grit). Work the 600-grit disk over the entire leaf, removing all of the annealing stain.

TIP: Focus on removing the file marks and the leaves will begin to round themselves out almost by magic.

Finishing

Photo 16 Sand and scrub the hallmarked side of the cuff. Polish with Tripoli and a buff. Cover with masking tape to protect the polish.

Photo 17 Using your fingers, bend the cuff blank over the bracelet mandrel to

shape it.

Photo 18 Use a non-marring mallet to hammer and smooth out the center stem. Check the fit on your wrist. Sand down the edges of the narrow leaflet tip if it scratches.

TIP: Use your saw and blade like a file to clean up the bridges and other details you may have missed.

Photo 19 Use a silicone wheel to reduce the thickness of the bridges between the subleaflets. Scrub cuff in hot, soapy water to remove grit. Polish with Tripoli and clean.

BETSY LEHNDORFF is a silversmith in Northeast Michigan and shows her work at several local galleries. She has been writing for *Lapidary Journal Jewelry Artist* since 2009.



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SKILLS

- Metal clay use
- Kiln use

TIME IT TOOK

- 1 hour for simple ring
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Designing *with* Paper Clay

Take advantage of the versatility of another form of a popular medium

BY NOËL YOVOVICH

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Any technique that works with paper — including punching, cutting, tearing, folding, and layering — will work with sheet or paper clay. One of my favorite ways to design with this versatile material is what I think of as “playing with Colorforms™”. Like most toys, the modern version of these vinyl shapes from my childhood have branched out since I played with them so long ago. My toy had simple geometric shapes that would cling to a background or to each other. This is the essence of working with sheet clay (as I will call it here, for simplicity’s sake) at its most basic. Cut or punch, roll out a background, lightly wet the background or the back of the cut shape, and just set it in place. I generally like to have the covered contour to show through where the pieces overlap, so I prefer the slightly thinner PMC™ Sheet over Art Clay Paper Type™.

Basic Overlay Ring

Start by creating a plain straight ring band out of regular clay, and allow the ring to dry to leather-hard so you can handle it.

Photo 1 The absolute easiest way to create overlays is to cut a strip and then chop it into squares, which can in turn be cut into triangles.

Photo 2 I like to punch favorite shapes

with paper punches. You can even use a square paper punch if you like perfect repetitions or cut by hand if you prefer a more organic effect. For very neat repetitions, you will need to measure around the ring, and figure out what size overlay you need to have it come out right.

Photo 3 In this example with the overlapped squares, one repetition was measured from exposed corner to the exposed corner of the next square as in the photo, not across the whole square.

TIP: If you don’t like to measure, cut regular paper pieces and experiment with them until they fit, then use the paper as a template. It is worthwhile to do a little measuring and planning ahead of time, because once you wet and apply the sheet squares, you need to leave them alone. You may be able to reposition them a little, but you run the chance you may smear and ruin them.



MATERIALS

Paper clay or sheet clay
Several plain ring bands; clay dried to leather hard

TOOLS

METAL CLAY TOOLS: Paper punch, work mat, brayer or roller, water container, scissors, assorted tubing, brush, tweezers, flat file, craft knife, paper towel, silver oxidizing solution

ADDITIONAL TOOLS: Kiln for firing, Poly blade, small foam makeup applicators

SOURCES

Most of the tools and materials for this project will be available from well-stocked jewelry supply vendors, many of whom can be found in our Advertisers’ Index, page 71.

One of my favorite ways to design with this versatile material is what I think of as “playing with Colorforms™”.



Photo 4 My preferred method to apply paper-type appliques is to use a small foam cosmetics applicator dipped in water to work up a bit of slip on the surface of the backing piece, then lay the paper-type piece in place. With this slippery surface (but no puddles of water) it is possible to adjust the new applique just a bit before it really adheres. Small pieces may require tweezers, but be as gentle as possible or you will cut into the clay.

Variations on the Basic Overlay Ring

Photos 5 and 6 Variations on this theme are endless and make it fun to plan out ahead of time when using paper clay.

Photo 7 Using the cut out as well as the clay you cut it from will give you two types of overlay results.

Photo 8 Squares with smaller cut-outs make great design elements! Punch

the smaller element first, then turn the larger punch upside down and center the small cut-out in the opening of a larger punch.

Designing on a Flat Surface

Photo 9 An extension of the idea of building designs out of geometric shapes is to create architectural elements — as in a landscape. A rectangle plus a triangle becomes a house. The evocation of childhood that springs from these simple geometric elements has charm all its own. The addition of perspective elements is a way to draw the viewer deeper into your scene.

10



11



12



Photo 10 To make quick work of windows and doors and other repeated small shapes, create a cutting tool. I look for brass tubing at the hardware store, or you can use silver tubing if you have it on hand.

Photos 11 and 12 File the edge of the tube sharp for a cleaner cut. If you file a bevel on the outside on one end and on the inside on the other end, each section of tubing will give you two different sizes of cutter.

Photos 13 and 14 In this simple house design, the hardest part to create was the puffs of smoke. Paper-type clay isn't stiff enough to cut little shapes with scissors, and curves are challenging with a craft knife. It is possible to get close to the final shape with the knife, and then hold the piece in your fingers to smooth the edges a bit with a wet foam applicator. Once these elements are added, a frame makes a nice finishing touch.

Photo 15 I take these techniques even further by adding textures and modeled elements.

NOËL'S NEW METAL CLAY VIDEOS

Noël works with PMC™ Sheet and Art Clay Paper Type™ in this project, but in two of her newest videos, she also teaches us new techniques with metal clay. Add a special touch to your metal clay work as Noël shows you how to make your own unique molds in *Make Simple Molds for Repeating Jewelry Designs in Metal Clay*. Utilize found objects, paper, and more to create distinctive stamps and molds for metal clay, as well as polymer clay and glass clay. In *Metal Clay Findings for Pins and Pendants*, Noël creates innovative metal clay findings that match can be customized to match the style of your jewelry. Make your findings just as special, functional and professional as the unique jewelry you are designing.



Both videos are available now at interweavestore.com.

13



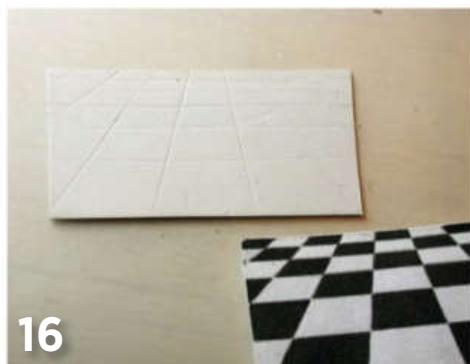
14



15



A rectangle plus a triangle becomes a house. The evocation of childhood that springs from these simple geometric elements has charm all its own. The addition of perspective elements is a way to draw the viewer deeper into your scene.



Get More Ambitious

My favorite way to use paper-type clay is to make a shadow box where I can place objects on a background using forced perspective. The key to this illusion is to use a checkerboard floor to trick the eye.

Photo 16 The trick to making a good receding perspective is to start with a picture of such a floor, to get the proportions right. These are easy to find online. I print out few, after sizing and adjusting them in a photo or drawing program, and then cut out a template that fits my design. I transfer the lines by scoring with a poly blade, just hard enough to show on the clay but not hard enough to cut through. Then I remove the paper and cut along each line by pressing down with the poly blade. If you can manage to cut not-quite-all-the-way through, the clay will hold together until you break it apart to place it on the background. If it gets scattered, it will be quite difficult to figure out where each piece goes. The good news for all this work is that you get two floors' worth of tiles using this process, since you only apply every other piece to one background. Don't forget to apply water just before you apply each piece.

Photo 17 When the background is complete, it's like a canvas. What will

you put on it? I like to build a shallow box around my perspective floor and add objects. In this example, I added a fireplace, using sheet, then I modeled a table out of PMC+, using paper templates to get the design right. As I played with a bit of clay, it suddenly looked like a bird, so I made more and placed them according to the perspective. The final touch, again made from sheet, is what might be an abstract work of art on the wall — or the eye of a cat pressed against a window. Have fun, and let your imagination run wild!

TIP: If a bit of sheet is not sticking, it is ok to drip a drop of water on it. Follow up quickly by drawing off extra water with a corner of a napkin or paper towel. Once excess water is absorbed away, gently press the loose spot into place.

Photo 18 After firing according to the brand directions, I like to highlight the details I have labored to create by using oxidizer and selectively polishing. Have fun, and let your imagination run wild!

NOËL YOVOVICH makes jewelry, teaches jewelry making, and writes about jewelry making from her home and studio in Evanston, Illinois. But she will soon be hitting the road in an RV equipped with a small studio! Watch for updates on her adventures in her blog, *A Gem of an Idea: What Passes for Wisdom in My World* at ganoksin.com/blog/noel.



see more work

Their Turn
PAGE 8

Add luxurious color to your jewelry metal in minutes!

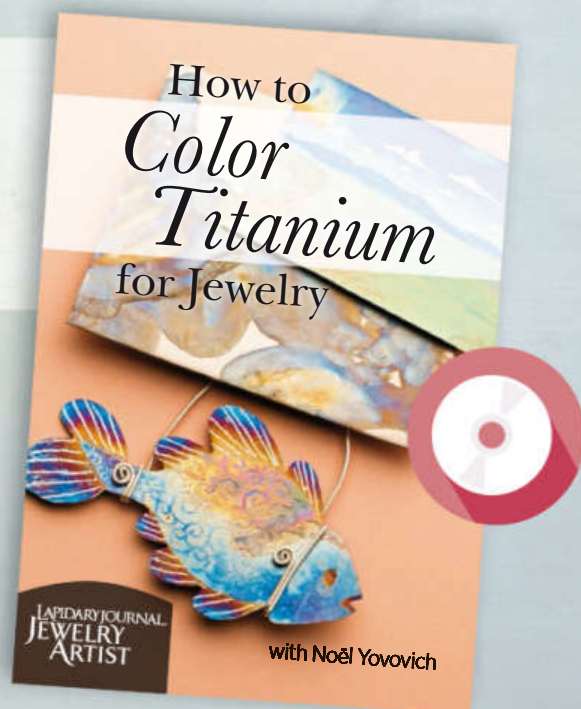
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JEWELRY PROJECT

SKILLS

- Creativity
- Torch control

TIME IT TOOK

4 or 5 hours, not counting tumbling and pickle time (but I'm slow!)



Serendipity Holiday Pendant

"It's scrap — I was going to melt it down anyway!"

BY MIKE HANNICKEL

IT'S GREAT TO FORCE YOURSELF

 to be more creative by limiting your resources. We've all seen how humans with limited resources can produce amazing work, and the metal art created thousands of years ago is often very sophisticated, especially when you imagine how it was created with the limited tools available at the time. Wow!

This pendant is more about a state of mind than a specific technique, so be free. Dive in. Move things around. Explore the materials. Have fun! What's the worst that can happen? You were going to recycle the scraps anyway so there's really nothing to lose.



Gather the Materials

Photo 1 Always keep your silver scrap separate from any ferrous metal contaminants. You may consider using mixed non-ferrous metals in your project, but I wouldn't recommend it for starters.

Photo 2 Spread out your scrap so you can see what's available for a piece. Challenge yourself to use only these materials — with the exception of whatever you may need to set some stones, make a special bail, or add a brooch pin.

Photo 3 Subtle and surprising textures add a lot to jewelry, so I'll have a little fun texturing some of the flat pieces. Texturing hammers are a great way to go. I made this one from a \$2 ball

peen hammer using my flex-shaft and a cut-off disc.

TIP: Before you start your layout, pickle, rinse, and dry your scraps so they are clean for soldering. Handle the metal with tweezers after that to keep the silver clean.

Photo 4 In the past, I've done abstract "serendipity scrap" pendants, earrings, and brooches, but this time, my materials tell me to make an evergreen tree ornament or pendant. Lay out something that strikes your fancy on a hard (compressed) charcoal block.

During the layout stage, if I think my project might need a bail, ear wire, or hanger, I'll put a loop of some kind on top. Notice any interesting "negative" space cutouts in your scrap from past bezel bases or piercing projects? Use scraps that are of a somewhat similar gauge. I'm staying with bits that are in the 22- through 18-gauge range, and the pieces can overlap one another.

TIP: Each little scrap may need more than one point of contact with other scraps. This helps keep the fabrication solid. You may want to bend some of them to get the contact you need. If some spots don't join well on the first go-around with the torch, address them with a second heating.

Design Start

It's time to recycle all these silver scraps. But just look at all those cool shapes! Hmmm ..."

MATERIALS

Sterling silver scraps

Hard wire solder

TOOLS

HAND: Pliers, texturing hammer, steel bench block or small anvil, sandpaper, tweezers, cheese-cloth, files, hallmark stamp, hammer for hallmark stamps, cylindrical mandrels, visual magnification

SOLDERING: Hard (compressed) charcoal block, oxygen barrier (boric acid and denatured alcohol), liquid flux, needle-tip flux dispenser, Smith Little Torch (oxy-propane with #7 tip), quench water container, cross-lock tweezers for hot silver, pickle pot, pickle pot tongs

SAFETY: Good ventilation, good lighting, eye protection (good goggles), full-face shield

EQUIPMENT: Tumble-Vibe vibratory tumbler, stainless steel shot in tumbler with Dawn dish soap and water, flexshaft with assorted grinding and polishing attachments, 120 grit bristle disc or brass brush

SOURCES

Most of the tools and materials for this project will be available from well-stocked jewelry supply vendors, many of whom can be found in our Advertiser's Index, page 71.



Design Challenge

We all have different scrap, so everyone's results will be absolutely unique. It's not about sketching, resketching, and rounding up materials before you actually touch any tools or metal. These are important skills, to be sure, but the point here is not to do that.

To the Torch

The biggest problem with my first "serendipity scrap" project was deciding how to solder a mess like this together. I originally learned soldering by carefully placing pallions (solder snippets). For me, that procedure proved to be an unreasonable plan for such a complex design. By using hard wire solder, I can attack the whole thing at once without delicate pallion placement. Or you may choose to "pick solder" instead. To my eye, the color of hard solder is nearly identical to sterling, so if some solder blobs are visible they become "part of the art."

Photos 5 and 6 Add plenty of oxygen barrier to minimize fire scale. With a small brush, I dribble my boric acid/denatured alcohol solution all over the piece and flame off the alcohol.

Photo 7 The piece should be well covered with the boric acid or other fire scale preventer such as Firescoff spray.

Photo 8 Add flux. I use liquid flux such as Battern's, Solder-X, or My-T-Flux with a needle-tip dispenser so my

arrangement is not disrupted. Every spot that needs to be soldered must be fluxed to help the solder flow.

PHOTO 9 Next comes the torch. As a beginning silversmithing student, this always made me nervous. What if it doesn't join? What if it melts? Now is the time to remind yourself that you are working with scrap that you were going to recycle anyway! I usually start at the top (the part furthest from where I stand) and work my way down toward me.

I always have a long piece of hard wire solder (10 inches) ready to go. It's not a bad idea to sand your wire solder with 220 grit paper to be sure it's clean, too. I use that nice neutral (not too "hissy") flame from my little oxy-Prpane torch with a #7 (large) tip.

As each little join reaches the color or shimmer that tells you the solder will flow, bring in the wire and seal the deal, then keep moving.

Photo 10 When the main solder operation is done, quench the work piece in water, then pickle, rinse, and dry.

Pickle and Finish

Photo 11 Inspect your piece carefully with magnification and fingertips. Check for good solder connections and sharp spots. Another way to help find the problems is to lay the project on your bench and drag a small piece of cheesecloth across it in several directions. The cloth will catch and show rough spots. Address them with a file, sandpaper, or your flex-shaft.

Photo 12 Decide which side will be the back and apply any appropriate hallmarks.

Photo 13 If you are not going to set any stones on your piece, you may choose to polish it now. I rely on stainless steel shot in a vibratory tumbler with a little water and a teaspoon of liquid dish soap for polishing complex form like this. Tumbling it overnight shines it and gently work hardens the silver as well.

Photo 14 When mine came out of the

tumbler, I decided it was too shiny, so I used a 120 grit white “bristle disc” all over for a warmer patina.

Photo 15 Still unsure whether this is an ornament or a pendant, I used a 2½” long piece of 20 gauge square wire out of my scrap pile and made an ornament hanger. I bent it with my fingers and nylon jaw pliers around a cylindrical mandrel. I considered adding some tube-set flame-fusion rubies to my “tree,” but thought it might be more clutter than accent in this particular case. This scrappy, free shape was enough for me.

Photo 16 I added a bail with a 6mm faceted amethyst set on it. Seeing the project, I think this is what it wanted to be.

MIKE HANNICKEL is a lapidary and silversmithing hobbyist and works as a composer for the Hal Leonard music publishing company.

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OUT OF THIS WORLD EXHIBIT

The Carnegie Museum of Natural History in Pittsburgh, Pennsylvania, is currently presenting a special exhibit, "Out of This World: Jewelry in the Space Age." The exhibit, which runs through January 4, 2016, showcases a variety of wearable and decorative arts related to outer space, space travel, the space age, and the influence these topics have had on human civilization. It will also include jewelry made from materials created or used during the space race, such as polymer, titanium, and fiber optic glass, as well as jewelry made with materials from space, including meteorites.

**MORE AT
CARNEGIE MNH.ORG**



ABOVE
John Hatleberg
Brooch
Moldavite (meteorite)

PHOTOS: COURTESY CARNEGIE MUSEUM OF NATURAL HISTORY

FROM FAR LEFT
Cartier Paris

An 18 K gold model of the Apollo 11 lunar module made to commemorate the first moon landing in 1969.

Marc Schneider

Dynasty Ring
Designed to look like the machine that Dr. Eleanor "Ellie" Ann Arroway (actress Jodie Foster) uses to make contact with alien life at the climax of the movie *Contact*.

How to Color Titanium for Jewelry



In a recent guest blog for JewelryMakingDaily.com, jewelry artist Noël Yovovich commented, "I love titanium. It feels like my special technique to me, the extra something that allows me to make my jewelry colorful, painterly, really uniquely my own. By the same token, I want other jewelry artists to know about titanium jewelry making and try it because I know their work will be different from mine, and I want to share this wonderful technique that few people currently use." In her new video, *How to Color Titanium for Jewelry*, Noël teaches you to get amazing colors from titanium through heating or anodizing. You'll also learn to saw, texture, brush color, and spot color titanium to make your jewelry designs even more special.

A frequent contributor to *Lapidary Journal Jewelry Artist*, Noël also teaches you to create incredible designs with another unusual medium in "Designing with Paper Clay" on page 54 of this issue.

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NEWS TO SHARE?

 Facets accepts news and images of new products, innovations, industry happenings, and events as space permits. Share your news by sending items to: KRosenbusch@interweave.com; or Lapidary Journal Jewelry Artist, 88 Glocker Way, #299, Pottstown, PA 19465. Please be sure to indicate "Facets" on the subject line or envelope.

Foldform Competition Winners

The Center for Metal Arts recently announced the winners of the 2015 Lewton-Brain Foldform Competition. Results were announced at the annual Foldform Awards Dinner at the Seligman Center for the Arts.

MORE AT CENTERFORMETALARTS.COM



First Place Dan Lippitt

Stovchen III
Tea Warmer
Sterling silver
PHOTO: COURTESY CENTER FOR METAL ARTS

ASK THE EXPERTS

questions, answers, & tips

By Tom & Kay Benham,
contributing editors

FLATWARE BRACELET BENDER JIG

Q *I'm interested in starting to bend spoons and forks to make jewelry into bracelets, pendants, and rings but need to locate a Flatwearable 6G Bender to start my project.*

Gary Connely

A After a little hunting around online, we discovered this curious tool made for shaping sterling and stainless flatware into bracelets at Flatwearable Artisan Jewelry Inc., flatwearable.com, 716-226-8088. We've included a photo of the tooling, and since it shapes stainless steel flatware into bracelets, it should easily handle forming sterling silver and copper sheet into flat cuff bracelets as well.

As for purchasing a used tool, you could check on eBay or Craig's list, or Facebook groups dedicated to selling used tools. Good luck in your quest.



ASK THE EXPERTS VIA EMAIL OR SOCIAL MEDIA!

? Send your questions and tips to: karla.rosenbusch@fwcommunity.com. Or post them to Facebook.com/JewelryMakingDaily or Twitter.com/JewelMakingDaily. Use the hashtag #AskTheExperts.

(Send snail mail to: Lapidary Journal Jewelry Artist, Attn.: Ask the Experts, 88 Glocker Way #299, Pottstown, PA 19465.)

Please include your full name and where you live. Answers may appear in a future issue.

PRICING

A question came in about the pricing in a recent demo about making production jewelry (see Your Turn, page 6), which prompted us to look into pricing in general. It's a topic so many jewelry makers are interested in. We think the writer's real question concerns the justification of the markup of the material and labor to a particular price.

Over the years, we've spoken with many jewelers about pricing their work and after covering materials, labor and overhead there are many other factors to be considered:

- What is the venue? Are you selling at a low end craft show, an upper tier art show or through an expensive gallery?
- Are you a fairly new jeweler with marginal craftsmanship and design skills?
- Are your designs new, exciting, and innovative?
- Has your work won any national contest or awards and been published in national magazines?

All these factors have a major influence on how much people are willing to pay to wear a work of art. Much has been written about the subject of pricing generally and of jewelry in particular. You might want to check out the February, 2010, issue of this magazine for Sharon Elaine Thompson's feature story called "Pricing and the Internet," which lays out the basic principles for pricing.



About Pricing...

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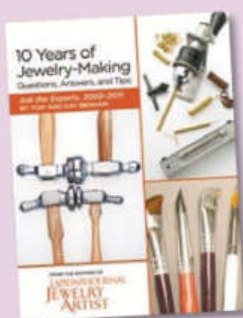
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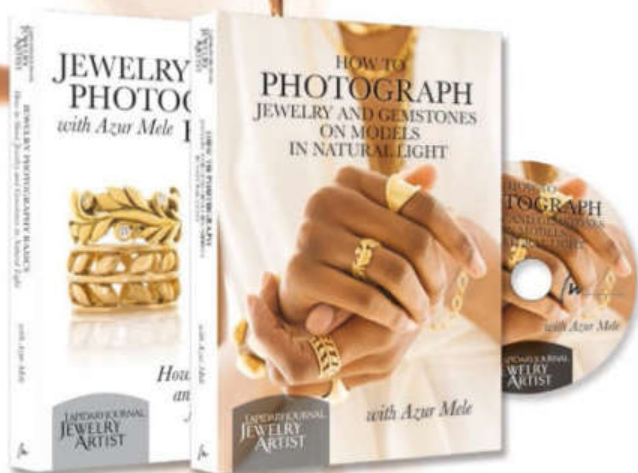
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Melissa Cable

DONE

Honestly, my biggest accomplishment is just being able to do what I love . . . make, teach, write, and develop tools that allow other makers to explore materials in the way I have come to love.

DOING

I am obsessed with leather. I love that I can treat it like metal at one moment and like clay the next. These explorations led to my newest book, *Beautiful Leather Jewelry*, leather jewelry making DVDs, and my Create Recklessly tool line. I am still discovering new things about leather and its properties everyday. You can see my work at createrecklessly.com.

FIRST PIECE

Oddly, my high school social studies class took place in a room that also held an adult ed lapidary class. I was completely fascinated with the equipment (more so than social studies), so the teacher invited me to join in the class. I made a cabochon from picture jasper that I still have. I pull it out often to see what it is thinking, but so far it's been quiet.

HEROES

Robert Dancik has been a giving mentor and really helped me accept how I create. I was very lost in practicing how I "should" work versus embracing how I "actually" work. It is freeing to finally accept yourself. Plus, he is as obsessed by materials as I am and I love his mixed media work. Other artists I admire are Tia Kramer for her work with paper, Andy Cooperman's work with metal and plastics, Cynthia Toops polymer clay work, Laura Bowker's

work with glass, Peg Fetter's steel designs and Nancy Megan Corwin for her chasing and repoussé. I love artists who can bring out the best in a material.

DESIGN SOURCES

I am very much inspired by the materials I use. I am curious by nature, so I experiment with almost everything I pick up. Through these explorations I get to know the material and to understand how it reacts under different circumstances. Inspiration is born when the unexpected occurs.

FAVORITE PART OF DOING

That moment when the unexpected occurs and inspiration is born . . . I am not sure if there is anything more exciting than that.

THE ONE THAT GOT AWAY

Bill Strueve offered to help me

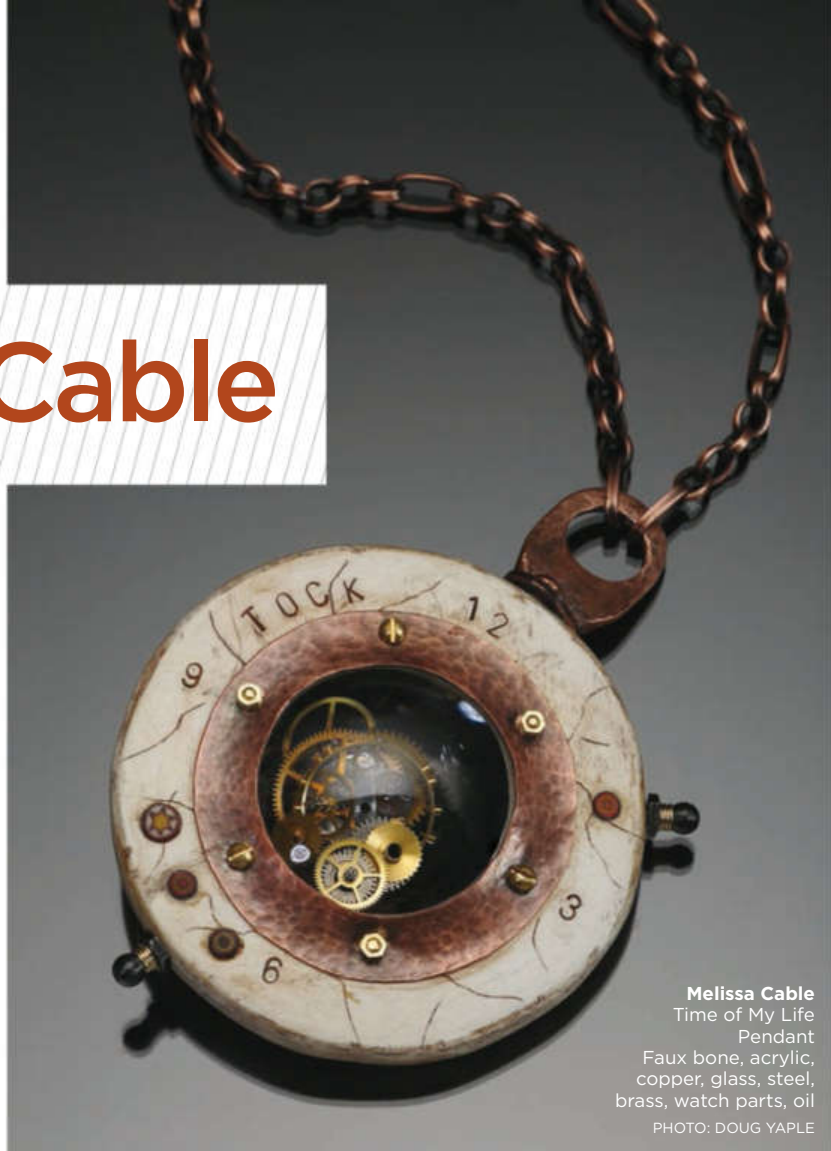
explore density mediums that would allow the objects in my acrylic globe pendants (see photo) to float. I haven't taken him up on his kind offer and I really need to. He's a genius.

ON BENCH NOW

Limestone concretions from Gary Wilson. I wrote about them in my October/November 2015 column in *Step by Step Wire Jewelry*. One of them has been whispering to me for quite some time, but it is nagging me now, so I need to sit down and work with it.

LATEST VENTURE

I just shot two videos on creating jewelry with leather — *Introduction to Leather Jewelry Making* and *Intermediate Leather Jewelry Making*. For anyone who wants to add leather to their jewelry designs, the videos (and back issues of *Step By Step Wire Jewelry*) are available at interweavestore.com.



Melissa Cable
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